# General Cell Collection

**NCBI Code:** C101
**Designation:** Vero
**Species:** African green monkey
**Tissue:** Kidney
**Morphology:** Fibroblast-like
**Description:** The Vero cell line was initiated from the kidney of a normal adult African green monkey (Ceropithecus aethiops). The cells were established in a medium consisting of a 0.5% lactalbumin hydrolysate, 0.1% yeast extract and 0.1% polyvinylpyrrolidone (PVP) in 98% Earle's BSS, and 2% calf serum (heat inactivated). The concentration of calf seum was later increased to 5%. Beginning with the 97th passage the cells were maintained on 95% Morgan, Morton, and Parker's medium 199 and 5% FBS (not inactivated); however, the cells have also been successfully maintained on 95% minimum essential medium (Eagle) with non-essential aminoacids and Earle's BSS and 5% FBS. The Vero cell line has been employed extensively in virus replication studies and plaque assays. The cell line has been useful for assay of SV-40, SV-5, measles, arboviruses, reoviruses, rubella, simian adenoviruses and polioviruses.
**Culture Medium:** Medium 199 + 5% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 140
**ATCC Number:** CCL-81
**ECACC Number:** 88020401
**Reference:** Nippon Rinsho 1963, 21:1209; Kitasato Arch Exp Med 1964, 37:27; Proc Soc Exp Biol Med 1967, 125:119; ibid 1967, 125:602; ibid 1967, 125:636; ibid 1967, 125:741; Nature 1967, 216:271; Arch Gesamte Virusforsch 1967, 21:155; ibid 1967, 21:243.
**Karyology:** 2n=60, hypodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **2** | **1** | **2** | **13** | **3** | **1** | **1** | **3** | **1** | **1** |
| **47** | **51** | **52** | **54** | **55** | **56** | **57** | **58** | **59** | **60** | **64** | **76** |

**Viability:** 99%, 2.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C102
**Designation:** Seraphina
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was derived from an African patient with Burkitt's lymphoma.The cells are infected with EBV and display t(8:14) chromosomal translocation.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 23,25 | 6,9 | 10,11 | 15,16 | 17 | 12 | 8,10 | 12,14 | 12 | 10 | 16,17 | 27 | X |

**Reference:** J Nat Cancer Inst 1987 78:235-242, Int J Cancer 1994 58:226-232.
**Karyology:** 2n=46, diploid-hyperdiploid cell line **Chromosome Frequency Distribution (Cells /Chromosomes):**

| **18\| 2 \| 5 \| 1 \| 1 \| 1** |
|---|
| **46\|47\|48\|57\|64\|85** |

**Viability:** 82%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C103
**Designation:** BL 28
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was derived from an African patient with Burkitt's lymphoma. The cell line is EBV negative and display t(8:14) chromosomal translocation.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO

**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 23,25 | 6,7 | 8,11 | 14,15 | 17,18 | 11 | 8,12 | 10,13 | 11,12 | 11,12 | 12,13 | 29,31 | X,Y |

**Reference:** Journal of General Virology (1993) ;74, 1393-1398.
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \|17\| 5 \| 2 \| 2 \| 2 |
|---|
| 42\|46\|48\|49\|50\|51\|52 |

**Viability:** 100%, 2.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C104
**Designation:** BL 40
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was derived from an African patient with Burkitt's lymphoma. The cell line is EBV negative and display t(8:14) chromosomal translocation.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C..
**Isoenzymes:** LDH;G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 20,2 | 9 | 8,12 | 14,1 | 15 | 11,12 | 10,12 | 10,17 | 12 | 10,11 | 13,14 | 29,32 | X |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | | | 6 | | | | | | | | | |

**Reference:** Oncogene (1999) 18, 6388 ± 6397; The Journal of Immunology, 2000, 165: 2500-2510 **Karyology:** 2n=46, diploid-hyperdiploid cell line

**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **17\| 4 \| 6 \| 1 \| 1 \| 1** |
|---|
| **46\|47\|48\|53\|65\|10** |

**Viability:** 97%, 2.1 x 10^6 cells/vial

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C105

**Designation:** CCRF-CEM

**Species:** Human

**Tissue:** Hematopoietic

**Morphology:** Lymphoblast-like

**Description:** CCRF-CEM is a T lymphoblastiod cell line derived from peripheral blood buffy coat of a 4-year-old Caucasian female with acute lymphoblastic leukemia. The cells were cultured at a high population density in spinner-type suspension cultures with 90% minimum essential medium (Eagle) modified for suspension cultures and 10% FBS. Cultures were maintained at 2-3 x 10^6 cells/ml by the addition of 50-100% fresh medium daily. The cells are apparently free of virus-like particles as determined by electron microscopy and apparently do not synthesize immunoglobulins.

**Culture Medium:** RPMI 1640 + 20% FBS. The cell line was adapted to RPMI 1640 +10% FBS in NCBI.

**Preservation Medium:** FBS + 10% DMSO

**Subculture Routine:** Maintain cultures at 2-3 x 10^5 cells/ml, 5% CO2, 37`C. Maximum cell density at 1-2 x 10^6 cells/ml.

**Isoenzymes:** LDH,G6PD, NP

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**DNA Typing:**

| **CSF1PO:** | **FGA:** | **TH01:** | **TPOX:** | **VWA:** | **D3S1358:** | **D5S818:** | **D7S820:** | **D8S1179:** | **D13S317:** | **D16S539:** | **D18S51:** | **D21S11:** | **AMEL:** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 23,24 | 6,7 | 8 | 15,18, 19 | 14,15, 16 | 12,13, 14 | 9,10, 14,15 | 13 | 12,13 | 9,10, 13,14 | 13,14, 16 | 28 | X |

**ATCC Number:** CCL-119
**ECACC Number:** 85112105
**Reference:** Cancer 1965, 18:522; Exp Cell Res 1965, 40:197; Cancer 1966, 19:1725.
**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 2 \| 3 \| 1 \| 1 \| 2 \| 2 \| 2 \| 4 \| 1 \| 1 \| 3 \| 1 |
|---|
| 63\|66\|68\|72\|77\|78\|79\|80\|81\|82\|83\|84\|85\|86\|87\|88\|90\|92 |

**Viability:** 99%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C106
**Designation:** CA46
**Species:** Human
**Tissue:** Skin
**Morphology:** Lymphoblast-like
**Description:** The CA46 cell line was initiated from ascites fluid of a patient with Burkitt`s lymphoma. The cells are EBV nuclear antigen (EBNA) negative, have a doubling time of approximately 16 hours and reach a saturation density of over 4 x 10^6 cells/ml. CA46 cells express surface IgM K (kappa) and secrete IgM which does not bind to protein A. Twelve percent of the cells expressed complement receptors, Fc receptors were undetectable.
**Culture Medium:** RPMI 1640 + 20% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 5-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH, G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 19,23 | 7,9 | 8,9 | 15,16 | 16,18 | 13 | 11,12 | 16 | 8,12 | 11,12 | 13,16 | 27,28 | X |

**ATCC Number:** CRL-1648
**ECACC Number:** 95010509
**Reference:** J Nat Cancer Inst 1980, 64:477; J Immunol 1982, 129:1336.

**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 2 \|23\| 2 |
|---|
| 43\|44\|45\|46\|47 |

**Viability:** 73%, 2 x 10^6 cell/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C107
**Designation:** BHK21 (clone-13)
**Species:** Syrian hamster
**Tissue:** Kidney
**Morphology:** Fibroblast-like
**Description:** This cell line is a subclone of the parent line derived from 5 unsexed 1-day-old hamster kidneys. It is used extensively for virus replication studies ie poliovirus, rabies, foot and mouth disease, VSV (Indiana strain), herpes simplex, Ad25 and arboviruses.
**Culture Medium:** Eagle's MEM + 5-10% FBS + 5% Tryptose-phosphate broth (TPB). The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6 every 2-3 days, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 67
**ATCC Number:** CCL-10
**ECACC Number:** 85011433
**Reference:** Virology 1962, 16:147; J Nat Cancer Inst 1963, 30:795. .
**Karyology:** 2n=44, pseudodiploid cell line+
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 3 \| 3 \| 5 \| 2 \| 6 \| 5 \| 1 \| 2 |
|---|
| 58\|62\|64\|66\|67\|68\|69\|70\|72\|73\|74 |

**Viability:** 94%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where

the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C108
**Designation:** BHK21-2P (clone-13)
**Species:** Syrian Hamster
**Tissue:** Kidney
**Morphology:** Fibroblast-like
**Description:** This cell line is derived from the parent line BHK-21 (clone-13), and has been adapted to growth in suspension. This cell line has the same virus susceptibility as the parent line.
**Culture Medium:** GMEM + 10% FBS + 5% Tryptose-phosphate broth (TPB). The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS +10% DMSO
**Subculture Routine:** Maintain cultures at 2-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 3
**ECACC Number:** 84111301
**Reference:** J Nat Cancer Inst 1963;30:795
**Karyology:** 2n=44, pseudodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **3** | **2** | **19** | **2** | **1** | **1** | **1** | **1** |
| **42** | **43** | **44** | **45** | **46** | **56** | **57** | **68** |

**Viability:** 100%, 6 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information is partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C109
**Designation:** P3X63Ag8.653
**Species:** Mouse
**Tissue:** Hematopoietic
**Morphology:** lymphoblast

**Description:** P3X63Ag8.653, is a non-Ig-secerting or synthesizing subclone of the mouse BALB/c myeloma cell line P3X63Ag8 that has lost the ability to produce immunoglobulin heavy or light chains. The cells were isolated by three successive cycles of sorting with a fluoroescence-associated cell sorter followed by several series of cloning in order to obtain a stable derivative which was totally negative for intracellular expression of immunoglobulin heavy or light chains. The P3X63Ag8.653 is comparable to other myeloma lines used in the fusion process with respect to growth properties, fusion frequency and stability of resulting hybrids which produce monoclonal antibody of a desired specificity.
**Culture Medium:** RPMI 1640 + 10% FBS. The cell line was adapted to RPMI 1640 +10% FBS in NCBI.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Maintain cultures at 3-5 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1580
**ECACC Number:** 85011420
**Reference:** J Immunol 1979, 123:1548.
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **4** | **2** | **12** | **2** | **2** | **2** | **1** | **1** |
| **40** | **47** | **48** | **49** | **50** | **51** | **52** | **54** | **56** | **58** |

**Viability:** 95%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C110
**Designation:** B95-8
**Species:** Cotton-top marmoset monkey (Saguinus oedipus)
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast and fibroblast-like
**Description:** The B95-8 cell line was initiated by exposing marmoset blood leukocyte to EBV extracted from a human leukocyte line. B95-8 is a continuous line and releases high titers of transforming EBV. Handle as potentially biohazardous material under at least Biosafety level 2 containment. The line provides a source of EBV to establish continuous lymphocytic lines from human donors. The line also releases an unidentified type D retrovirus presumably of primate origin.
**Culture Medium:** RPMI 1640 + 10% FBS.

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, may need to use trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1612
**ECACC Number:** 85011419
**Reference:** Proc Nat Acad Sci, USA 1972, 69:383; ibid 1973, 70:190; In Vitro 1984, 20:486; J Tissue Culture Methods 1991, 13:39.
**Karyology:** 2n=60
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | |
|---|---|---|---|---|---|---|
| **2** | **2** | **10** | **3** | **11** | **1** | **1** |
| **42** | **43** | **44** | **45** | **46** | **48** | **63** |

**Viability:** 99%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C111
**Designation:** CHO
**Species:** Chinese hamster
**Tissue:** Ovary
**Morphology:** Epithelial-like
**Description:** A sub-clone of the parental CHO cell line originated by Puck in 1957. The cells have an absolute requirement for L-proline.
**Culture Medium:** Ham's F12 + 10% FBS. The cell line was adapted to RPMI1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C,
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 85050302
**Reference:** J Exp Med 1958, 108:945.
**Karyology:** 2n=22
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | |
|---|---|---|---|---|---|---|
| **1** | **7** | **3** | **16** | **1** | **1** | **1** |

| 18\|19\|20\|21\|23\|31\|33 |
|---|

**Viability:** 94%, 1.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C112
**Designation:** DAUDI
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** The Daudi cell line was derived from a 16-year-old Negroid male with Burkitt's lymphoma. It has been demonstrated that the cells are positive for EBNA and VCA and exhibit surface markers for the Fc fragment of IgG, complement receptors and surface bound immunoglobulin. The cells also produce tumors in nude mice and are capable of forming colonies in agar. The Daudi cell line is a well characterized B lymphoblast cell line which has been employed extensively in studies of mechanisms of leukemogenesis. Handle as potentially biohazardous material under at least Biosafety level 2 containment.
**Culture Medium:** RPMI 1640 + 20% FBS. The cell line was adapted to 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 2-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11,13 | 24,25 | 8,11 | 8,11 | 16,17 | 15,17 | 11,12 | 10 | 13 | 13 | 12 | 13,14 | 30,31 | X,Y |

**ATCC Number:** CCL-213
**ECACC Number:** 89120702
**Reference:** Lancet 1967, 2:1068; Cancer Res 1968, 28:1300; Int J Cancer 1977, 19:337.
**Karyology:** 2n=46, near triploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 5 \| 2 \| 5 \| 2 \| 4 \| 1 \| 3 \| 2 \| 1 \| 2 |
|---|
| 61\|64\|65\|68\|69\|70\|71\|72\|73\|74\|75\|76\|78 |

**Viability:** 96%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C113
**Designation:** COR-L105
**Species:** Human
**Tissue:** Lung
**Morphology:** Epithelial-like
**Description:** The COR-L105 cell line was isolated from the pleural effusion of a 55-year-old Caucasian male.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 92031918
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | |
|---|---|---|---|---|---|
| **1** | **1** | **14** | **8** | **5** | **1** |
| **34** | **36** | **38** | **39** | **40** | **42** |

**Viability:** 98%, 2.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C114
**Designation:** EL4
**Species:** Mouse

**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** EL4 was established in tissue culture from a lymphoma induced in a C57BL/6N mouse by 9,10-dimethyl-1,2- benzanthracene. Antigens expressed by these cells include: G, a surface antigen induced by leukemia type G (Gross) Virus; H-2^b and Thy-1,2. These cells do not bear TL (thymus leukemia) antigen or surface immunoglobulin. This line is resistant to cortisol (10^-4 M) and dexamethasone but is sensitive to PHA (20 microgram/ml).
**Culture Medium:** DMEM + 10% FBS or horse serum. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** TIB-39
**ECACC Number:** 85023105
**Reference:** Br J Cancer 1950, 4:372; Cancer Res 1965, 25:813; J Immunol 1972, 108:1146, J Nat Cancer Inst 1972, 24:256.
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | |
|---|---|---|---|---|---|
| **1** | **9** | **30** | **6** | **2** | **2** |
| **35** | **36** | **37** | **38** | **39** | **40** |

**Viability:** 98.2%, 2.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C115
**Designation:** HeLa
**Species:** Human
**Tissue:** Cervix
**Morphology:** Epithelial-like
**Description:** Hela was the first aneupoid, epithelial-like cell line to be derived from human tissue and maintained continuously by serial cell culture. It was isolated from a carcinoma of the cervix of a 31-year-old Negro patient. Since its origin, it has been one of the most widely studied cell lines. Hela cells have been reported to contain human papilloma virus 18 (HPV-18) sequences. Handle as potentially biohazardous material under at least biosafety level 2 containment.
**Culture Medium:** EMEM (EBSS) + 10% FBS. The cell line was adapted to RPMI 1640 +

10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 37
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9,10 | 18,21 | 7,8 | 8,12 | 16,18 | 15,18 | 11,12 | 8,12 | 12,13 | 12,14 | 9,10 | 16 | 26,27 | X |

**ATCC Number:** CCL-2
**ECACC Number:** 93021013
**Reference:** Cancer Res 1952, 12:264; Proc Soc Exp Biol Med 1954, 87:480; Obstet Gynecol 1971, 38:945; EMBO J 1984, 3:1151; Virology 1985, 145:313; Proc Nat Acad Sci USA 1991, 88:5523.
**Karyology:** 2n=46, near triploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 6 \| 1 \| 5 \| 8 \| 2 \| 3 \| 2 |
|---|
| 48\|57\|59\|60\|61\|62\|63\|64\|68\|69 |

**Viability:** 95%, 3.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C116
**Designation:** G-292, clone A141B1
**Species:** Human
**Tissue:** Bone
**Morphology:** Fibroblast
**Description:** The cell line was initiated from a primary bone tumor of a 9-year-old Caucasian female.
**Culture Medium:** McCoys 5a + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO

**Subculture Routine:** Split confluent cultures 1:2 to 1:5, ie seeding at 2-5 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22 | 6 | 8 | 14 | 16,17 | 12,13 | 9 | 15 | 9,14 | 11 | 17 | 30 | X |

**ATCC Number:** CRL-1423
**ECACC Number:** 90110522
**Reference:** Pediatric Res 1987, 12:485.
**Karyology:** 2n=46, hypotriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 2 \| 4 \| 1 \| 3 \| 4 \| 3 \| 2 \| 6 \| 3 |
|---|
| 50\|51\|52\|53\|54\|55\|56\|57\|58\|59\|60 |

**Viability:** 96%, 1.2 x 10^6 cells/vial
**Comments:** secreted

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**NCBI Code:** C117
**Designation:** JIYOYE
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** The JIYOYE cell line was derived from the ascitic fluid of an African Negro boy with Burkitt's lymphoma of the liver. The cell line has been used in co-cultivation experiments with peripheral leukocytes from healthy female infants to establish the latter cells as long-term suspension cultures which acquired viral antigen and a sub-terminal secondary constriction in the N10 chromosome. Handle as potentially biohazardous material under at least Biosafety level 2 containment. The cells are partially resistant to polioviruses and vesicullar stomatitis viruses.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 4-6 x 10^5 cells/ml. Add fresh medium every 2-3 days.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1P | FG | TH0 | TPO | VW | D3S13 | D5S8 | D7S8 | D8S11 | D13S3 | D16S5 | D18S | D21S | AME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| O: | A: | 1: | X: | A: | 58: | 18: | 20: | 79: | 17: | 39: | 51: | 11: | L: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 23,24 | 7,9 | 6,8 | 15,19 | 16,17 | 12 | 8,10 | 14,15 | 12 | 9,10 | 12 | 27 | X,Y |

**ATCC Number:** CCL-87
**ECACC Number:** 88071302
**Reference:** J Bacteriol 1964, 89:252; J Clin Pathol 1965, 18:261; J Nat Cancer Inst 1966, 37:549; J Nat Cancer Inst 1967, 38:209; In vitro 1969, 4:165.
**Karyology:** 2n=46, aneuploid cells
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 3 \|19\| 2 \| 3 \| 1 \| 1 |
|---|
| 44\|45\|46\|47\|48\|49\|51 |

**Viability:** 97.2%, 5.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C118
**Designation:** 1321N1
**Species:** Human
**Tissue:** Brain
**Morphology:** Glial-like
**Description:** This cell line was derived from a human brain astrocytoma.The cell line has been mycoplasma eradicated using Mycoplasma removal agent.
**Culture Medium:** DMEM + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 18,23,24 | 6 | 8 | 18 | 15 | 11 | 9 | 14,15 | 9,11 | 12,13 | 13,14 | 27 | X |

**ECACC Number:** 86030402
**Reference:** Acta Path Scand 1972; 80:267; Proc Nat Acad Sci, USA 1977; 74:4816.
**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **1** | **1** | **3** | **1** | **16** | **2** | **2** | **1** |
| **45** | **47** | **60** | **70** | **71** | **72** | **73** | **74** | **75** | **76** | **77** |

**Viability:** 97%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C119
**Designation:** KG-1
**Species:** Human
**Tissue:** Bone marrow
**Morphology:** Myeloblast-like
**Description:** The KG-1 cell line was derived from a bone marrow aspirate obtained from a 59-year-old Caucasian male with erythroleukemia that evolved into acute myelogenous leukemia. The cells were cultured in suspension using alpha MEM containing 20% FBS and 10^-4 M alpha-thioglycerol. After 24 days in culture the cells were actively proliferating. KG-1 cells grow predominantly as single cells with numerous small, irregular aggregates of 8 to 14 cells interspersed throughout the static suspension. Morphologically, KG-1 cells resemble acute myelogenous leukemia showing considerable polymorphism with a predominance of myeloblasts and promyelocytes. A small percentage of the cells are mature granulocytes and occasionally macrophages and eosinophils are also present. The cells stain heavily with ASD chloroacetate esterase and 1-2 percent of the cells stain with peroxidase and Sudan black B. A unique characteristic of KG-1 cells is their responsiveness to colony-stimulating factor measured by the formation of colonies in soft-agar cultures. The KG-1 cells lack specific markers for lymphocytic cells. They have no surface immunoglobulins or EBV-associated antigens but do express the human Ia-like or DR antigen. KG-1 cells differentiate without DNA replication into non-dividing macrophages when exposed to phorbol esters.
**Culture Medium:** DMEM + 20% FBS. The cell line was adapted to RPMI + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 22 | 7,8 | 7,9 | 14,19 | 15,16 | 13 | 8,10 | 13,14 | 11,12 | 10,11 | 10,18 | 28,29 | X,Y |

**ATCC Number:** CCL- 246
**ECACC Number:** 86111306
**Reference:** Science 1978, 200:1153; Blood 1979, 54 Suppl 1:174a; ibid 1980, 56:344.
**Karyology:** 2n=46, near diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **3 \|13\|16\| 2 \| 1 \| 1 \| 1 \| 1 \| 1** |
|---|
| **45\|46\|47\|48\|49\|50\|52\|53\|55\|82** |

**Viability:** 90%, 2.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C120
**Designation:** JM
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphocyte
**Description:** The JM cell line is a T cell derived line with the ability to grow HIV.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 1 x 10^5 to 1 x 10^6 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 21,22 | 6,9 | 8,9,10 | 17,18 | 15,17 | 9 | 8,10 | 13,15 | 8,11 | 10,11 | 12,14 | 31,32 | X,Y |

**ECACC Number:** 86010201
**Karyology:** 2n=46, pseudodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 4 \|22\| 3 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 |
|---|
| 43\|45\|46\|48\|49\|51\|52\|54\|56\|58\|59\|64\|69\|91 |

**Viability:** 98%, 2.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C121
**Designation:** Jurkat E6.1
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** Jurkat E6.1 was derived from Jurkat-FHCRC cell line. This clone of Jurkat-FHCRC cell line produces large amounts of IL-2 after stimulation with phorbol esters and either lectins or monoclonal antibodies against the T cell Ag receptor. No IL-2 is produced in the absence of stimuli, and both stimuli are required for activation and lymphokine production. The cells can also be induced to produce human gamma interferon.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 20,22 | 6,9 | 8,10 | 18,19 | 15,17 | 9 | 8,10 | 13,15 | 8,11 | 10 | 12,19 | 31,32 | X,Y |

**ATCC Number:** TIB-152
**ECACC Number:** 88042803
**Reference:** J Immunol 1984, 133:123; J Immunol Methods 1993, 157:203.
**Karyology:** 2n=46, pseudodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 2 \|22\| 1 \| 1 \| 1 \| 1 |
|---|
| 44\|45\|46\|47\|48\|49\|65 |

**Viability:** 99%, 5.6 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C122
**Designation:** K562
**Species:** Human
**Tissue:** Pleural effusion
**Morphology:** Lymphoblast-like
**Description:** K562 is a continuous cell line established from the pleural effusion of a 53-year-old Caucasian female with chronic myelogenous leukemia in terminal blast crises. The cell population has been characterized as highly undifferentiated and of the granulocytic series. Studies on the surface membrane properties led to the conclusion that the K562 was a human erythroleukemia line. Studies indicated that the K562 blasts are multipotential, hematopoietic malignant cells that spontaneously differentiate into recognizable progenitors of the erythrocytic, granulocytic and monocytic series. The K-562 cell line has attained widespread use as a highly sensitive in vitro target for the natural killer assay.
**Culture Medium:** RPMI 1640 + 10% FBS; antibiotic-free.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 1 x 10^5 to 1 x 10^6 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 21,24 | 10 | 8,9 | 16 | 16 | 12 | 9,11 | 12 | 8 | 11,12 | 15,16 | 29,30 | X |

**ATCC Number:** CCL-243
**ECACC Number:** 89121407
**Reference:** Blood 1975, 45:321; J Nat Cancer Inst 1977, 77:83; Int J Cancer 1979, 23:143; Leukemia Res 1979, 3:363.
**Karyology:** 2n=46, near triploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 4 \| 1 \| 5 \| 5 \| 3 \|14\| 2 \| 1 |
|---|
| 53\|55\|63\|64\|65\|66\|67\|68\|69\|74 |

**Viability:** 96%, 2.6 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C123
**Designation:** McCoy
**Species:** Mouse
**Tissue:** Synovial fluid
**Morphology:** Fibroblast-like
**Description:** This line was originally derived from synovial fluid in the knee joint of a patient suffering from degenerative arthritis. In 1965 it was shown that McCoy cells were indeed human cells. However, another subline was in fact of mouse origin and possessed marker chromosomes characteristic of strain L mouse fibroblasts. McCoy cells presumed to be human, but which actually are mouse cells, have been disseminated from laboratory to laboratory throughout the world. Initial interest in McCoy cells followed the demonstration that ionizing radiation (coblat-60) greatly increased the susceptiblity of McCoy cells to infection by Chlamydia strain. The cells have been used to propagate laboratory strain of the 15 recognized serotypes of Chlamydia trachomatics.
**Culture Medium:** 90% Eagle's MEM with NEAA and EBSS + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1696
**ECACC Number:** 90010305
**Reference:** Proc Soc Exp Bio Med 1965, 118:354; Appl Microbiol 1972, 23:123; Zellforsch 1975, 47:158.
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 4 \| 5 \| 5 \|19\| 7 \| 4 \| 1 \| 3 \| 1** |
|---|
| **46\|47\|48\|49\|50\|52\|53\|54\|55\|56\|57\|58\|59\|60\|61\|63** |

**Viability:** 90%, 2.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the

information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C124
**Designation:** RAJI TK+
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was derived from the maxilliary lesion of a Burkitt's lymphoma patient. It produces high levels of thymidine kinase.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-6 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 19,27 | 6,7 | 8,13 | 17,19 | 15,16 | 10,13 | 10 | 15 | 13 | 8,11 | 17 | 27,30 | X,Y |

**ECACC Number:** 91112124
**Reference:** Lancet 1964, i:238.
**Karyology:** 2n=46, hyperdiploid

**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | |
|---|---|---|---|---|---|
| **1** | **1** | **5** | **5** | **16** | **2** |
| **43** | **45** | **46** | **47** | **48** | **49** |

**Viability:** 100%, 2.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C125
**Designation:** MRC-5
**Species:** Human
**Tissue:** Lung
**Morphology:** Fibroblast-like
**Description:** The MRC-5 cell line was derived from normal lung tissue of a 14-week-old male fetus. The growth medium used was Eagle's basal medium in Earle's balanced salt solution supplemented with 10% calf serum. Following the initial cultivation of the cells, subcultures were prepared twice weekly at a 1:2 ratio. When the cells reached approximately the 7th cell doubling the majority of the cultures were harvested to prepare a frozen cell stock. Subsequent observations revealed the MRC-5 cells are capable of attaining 42-46 population doublings before onset of the decline in proliferation usually experienced with human fibroblast lines. Comparative studies showed that MRC-5 cells replicate more rapidly and are less sensitive to adverse environmental factors than WI-38 cells. The MRC-5 cell line, like WI-38, is susceptible to a wide range of human viruses, is suitable for the production of viral vaccines, and has been useful in senescence studies.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 23
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 21,23 | 8 | 8 | 15 | 15,17 | 11,12 | 10,11 | 13 | 11,14 | 9,11 | 15,21 | 31 | X,Y |

**ATCC Number:** CCL-171
**ECACC Number:** 84101801
**Reference:** Nature 1970, 227:168; Proc Symp Human Diploid Cells, Yugoslav Acad Sci Arts, Zagreb 1970, 43:45; Nature 1972, 238:26; ibid 1972, 239:316.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 3 \| 1 \|24 |
|---|
| 42\|43\|44\|45\|46 |

**Viability:** 98%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the

information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C126
**Designation:** Namalwa
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This B cell derived cell line secretes small amounts of an IgM monoclonal antibody of unknown specificity and it has been used for commercial producion of human interferon. The cells contain the Epstein-Barr Virus(EBV) genome. Handle as potentially biohazardous material under at least Biosafety level 2 containment.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5%CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 22 | 7,10 | 6,11 | 14 | 16 | 12,13 | 11 | 13,15 | 11,12 | 9,10 | 14,16 | 27,28 | X |

**ATCC Number:** CRL-1432
**ECACC Number:** 87060801
**Reference:** Int J Cancer 1972, 10:44; J Cancer 1973, 12:396; Antimicro Agents Chemother 1979, 15:420.
**Karyology:** 2n=46, diploid- (aneuploid) cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **2 \|26\| 2** |
|---|
| **45\|46\|47** |

**Viability:** 99%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources.The quoted information are provided by the depositors or the cell banks where the cell were purchased from; therefore, these sources are responsible for validity of the information .Passage numbers are given when applicable and should only be considered as a guide. Hence , NCBI dose not guarantee that the passage number of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C127
**Designation:** RAJI
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** The Raji cell line of lymphoblast-like cells was establihed from a Burkitt's lymphoma of the left maxilla of an 11-year-old Negro male. This cell line grows in suspension as single cells without attachment to glass and as macroscopically visible clumps containing many hundreds of cells. Cells of the Raji line do not contain virus particles as demonstrated by electron microcopy and although the cells are resistant to vesicular stomatitis virus, this resistance is not transferred to other normally susceptible test cultures and an interferon-like inhibitor has not been found.
**Culture Medium:** RPMI 1640 + 10-20% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 19,27 | 6,7 | 8,13 | 16,19 | 15,16 | 10,13 | 10 | 14,15 | 13 | 8,11 | 17 | 27,30 | X,Y |

**ATCC Number:** CCL-86
**ECACC Number:** 85011429
**Reference:** Lancet 1964, 1:238; J Nat Cancer Inst 1966, 37:547; Trans NY Acad Sci 1966, 29:61.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **1 \|21\| 2 \| 2 \| 1 \| 1 \| 1 \| 1** | |
| **44\|46\|47\|48\|51\|56\|57\|58** | |

**Viability:** 98%, 2.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C128
**Designation:** RAMOS
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was dervied from a 3-year-old Caucasian male with histologic diagnosis of American Burkitt's lymphoma. The cell line is EBV-negative; however, EBV infectability and permanent conversion into EBV positive sublines is possible by in vitro infection. The cells have B-lymphocyte characteristics with surface-associated mio (M) and kappa (K) chains.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 20,25 | 7,10 | 8,9 | 15,16 | 14,15 | 7,12 | 11 | 13 | 13,14 | 10,13 | 15 | 30 | X |

**ATCC Number:** CRL-1596
**ECACC Number:** 85030802
**Reference:** Intervirology 1975, 5:319; Int J Cancer 1977, 19:337.
**Karyology:** 2n=46, hypodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | |
|---|---|---|---|
| **2** | **\|25\|** | **1** | **2** |
| **42** | **44** | **45** | **46** |

**Viability:** 92%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C129
**Designation:** SP2/0-Ag14
**Species:** Mouse x Mouse
**Tissue:** Spleen

**Morphology:** Lymphoid
**Description:** SP2/0-Ag14 is a myeloma variant used in the fusion process for obtaining cell lines (hybridomas) which produce antibody of a desired specificity. The SP2/0-Ag14 was isolated as a reclone of SP2/HL-Ag which was derived from SP2/HLGK, a hybrid between a BALB/c spleen cell with anti-sheep red blood cell activity and the myeloma cell line P3X63Ag8. SP2/0-Ag14 does not synthesize or secrete any immunoglobulin chains, is resistant to 8-azaguanine at 20 microgram/ml and does not survive in HAT containing media. The cell line has been used successfully in developing a number of hybridomas secreting specific monoclonal antibodies.
**Culture Medium:** DMEM with 4.5 g/L glucose + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1581
**ECACC Number:** 85072401
**Reference:** Nature 1978, 276:269; J Immunol 1981, 126:317.
**Karyology:**
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2** | **1** | **2** | **2** | **4** | **5** | **2** | **4** | **5** | **9** | **4** | **4** | **1** | **41** | **1** | **1** |
| **56** | **57** | **60** | **61** | **62** | **63** | **64** | **65** | **66** | **67** | **68** | **69** | **70** | **71** | **73** | **78** |

**Viability:** 99%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C130
**Designation:** U937
**Species:** Human
**Tissue:** Pleural effusion
**Morphology:** Lymphoblast-like
**Description:** The U937 cell line was established from malignant cells obtained from the pleural effusion of a 37-year-old Caucasian male with diffuse histiocytic lymphoma. It is one of only a few human cell lines still expressing many of the monocytic-like characteristics exhibited by cells of histiocytic origin. The cells bear receptors for Fc and C3, phagocytose antibody-coated erythrocytes and latex beads and stain strongly with nonspecific enzyme lysozyme. In addition, the cells lack EBV-related antigens and both surface and intracellular

immunoglobulins. Studies since 1979 have shown that U937 cells can be induced to terminal monocytic differentiation by supernatants from human/mixed lymphocyte cultures, phorbolester, vitamin D3 and retinoic acid, gamma interferon and TNF. The cells should be used for non-clinical, non-commercial research only.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 2-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22,25 | 6,10 | 8,11 | 14,15 | 16 | 10,12 | 9,11 | 12,13 | 10,12 | 11 | 13,14 | 27 | X |

**ATCC Number:** CRL-1593
**ECACC Number:** 87010802
**Reference:** Int J Cancer 1976, 17:565; J Exp Med 1976, 143:1528; Nature 1979, 279:328; J Immunol 1980, 125:463; Nature 1981, 292:848; Cancer Res 1983, 43:5826.
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **11** | **2** | **1** | **1** | **2** | **3** | **1** | **2** | **1** | **2** | **1** | **1** |
| **39** | **40** | **46** | **48** | **49** | **51** | **52** | **53** | **54** | **56** | **59** | **60** | **63** | **68** |

**Viability:** 97%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C131
**Designation:** AGS
**Species:** Human
**Tissue:** Stomach
**Morphology:** Epithelial-like
**Description:** This cell line was isolated from an adenocarcinoma of the stomach resected from a 54-year-old Caucasian female. The patient had received no prior anti-cancer therapy. The tumor sample was minced and fragments were maintained to establish the line in F10 and 20% FBS plus penicillin, streptomycin and gentamycin. Properties of the parent line and subclones

(doubling times, plating efficiencies, modal chromosome numbers, tumorigenicity and response to anti-cancer drugs) have been published.
**Culture Medium:** Ham's F12 + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:6, ie seeding at 2-5 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 23 | 5,6 | 8,11 | 15,16 | 15 | 9,12 | 10,11 | 13 | 12 | 10,12 | 13 | 30,34 | X |

**ATCC Number:** CRL-1739
**ECACC Number:** 89090402
**Reference:** Cancer Res 1983, 43:1703; Invest New Drugs 1983, 1:117.
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \|10\| 1 \| 6 \| 4 \| 3 \| 1 \| 1 \| 1 \| 1 |
|---|
| 44\|46\|47\|68\|50\|52\|66\|69\|78\|85 |

**Viability:** 98%, 1.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C132
**Designation:** B92
**Species:** Rat
**Tissue:** Nervous tissue
**Morphology:** Glial-like
**Description:** Ethyl nitrosourea induced tumor cell line. Neuronal and glial cells useful in research of distribution of neurotransmitter synthesis and brain specific antigens among nerve and glial. Morphology significantly affected when grown in serum free media.
**Culture Medium:** DMEM + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 85042304
**Reference:** Nature 1974, 249:224.
**Karyology:** 2n=42
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 5 \| 1 \|19\| 1 \| 3 |
|---|
| 41\|42\|43\|44\|45\|46 |

**Viability:** 96%, 5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C133
**Designation:** YO (YB2/3.Ag30)
**Species:** Rat
**Tissue:** Hematopoietic
**Morphology:** Lymphoid
**Description:** The full designation of this line is YB2/3.0Ag30. YO was derived from a hybrid myeloma YB2/3HL by cloning in soft agar to select a non-secreting sub-population. The cells are azaguanine resistant and do not secrete IgG.
**Culture Medium:** RPMI 1640 + 2mM glutamine + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 85110501
**Reference:** J Cell Biol 1982;93:576
**Karyology:** 2n=42
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 1 \| 3 \| 3 \| 2 \| 3 \| 8 \| 1 \| 3 \| 2 \| 1 \| 1 |
|---|
| 42\|44\|46\|47\|48\|49\|50\|51\|52\|53\|54\|57 |

**Viability:** 100%, 1.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C134
**Designation:** B65
**Species:** Rat
**Tissue:** Nervous tissue
**Morphology:** Neuronal-like
**Description:** Ethyl nitrosourea induced tumor cell line. Cell morphology significantly affected when grown in serum free media. Neuronal cells useful in research of distribution of neurotransmitter. Synthesizes brain specific antigens among nerve and glia.
**Culture Medium:** DMEM + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3, ie seeding at 4 x 10^4 cells/cm^2 using trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 85042305
**Reference:** Nature 1974, 249:224.
**Karyology:** 2n=42
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **4** | **4** | **5** | **4** | **3** | **1** | **1** | **1** | **1** | **1** | **1** |
| **35** | **36** | **39** | **40** | **41** | **42** | **43** | **44** | **46** | **47** | **48** | **49** | **57** | **59** | **65** |

**Viability:** 95%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C135
**Designation:** MCF-7

**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial-like
**Description:** This cell line was established from pleural effusion obtained from a 69-year-old Caucasion female. Cells exhibit some features of differentiated mammary epithelium including oestradiol synthesis. Cells may carry B or C type virus, therefore; may be considered as potentially biohazardous and should be handled in category 2 (P2) containment.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 57
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 23,25 | 6 | 9,12 | 14,15 | 16 | 11,12 | 8,9 | 10,14 | 11 | 11,12 | 14 | 30 | X |

**ATCC Number:** HTB-22
**ECACC Number:** 86012803
**Reference:** J Nat Cancer Inst 1973, 51:1409.
**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 3 \| 1 \| 5 \| 1 \| 4 \| 2 \| 7 \| 3 \| 2 \| 1 \| 1 |
|---|
| 60\|61\|62\|63\|64\|65\|66\|67\|68\|72\|74 |

**Viability:** 95%, 1.9 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C136
**Designation:** A-375
**Species:** Human
**Tissue:** skin

**Morphology:** Epithelial-like
**Description:** The A-375 cell line was derived from a 54-year-old female with malignant melanoma. The cell line produces rapidly growing subcutaneous tumors resembling amelanotic melanomas in antithymocyte serum-treated NIH Swiss mice and forms colonies on normal fibroblasts and in agar.
**Culture Medium:** DMEM + 15% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:8, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 37
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 20,23 | 8 | 10 | 16,17 | 15,17 | 12 | 8 | 11,14 | 11,14 | 9 | 12,17 | 28,30 | X |

**ATCC Number:** CRL 1619
**ECACC Number:** 88113005
**Reference:** J Nat Cancer Inst 1973, 51:1417.
**Karyology:** 2n=46, hypotriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 2 \| 2 \| 4 \| 3 \| 5 \| 2 \| 2 \| 4 \| 4 \| 2 \| 4 \| 1 \| 1 \| 1 \| 1 |
|---|
| 55\|56\|58\|59\|60\|61\|62\|63\|64\|65\|66\|67\|68\|69\|70\|72\|73 |

**Viability:** 95%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C137
**Designation:** A549
**Species:** Human
**Tissue:** Lung
**Morphology:** Epithelial-like
**Description:** This cell line was initiated through explant culture of lung carcinomatous tissue

from a 58-year-old Caucasian male. Further studies revealed that A549 cells could synthesize lecitin with a high percentage of desaturated fatty acids utilizing the cytidine diphosphocholine pathway. Multilamellar inclusion bodies were located on examination by transmission electron microscopy. Incorporation of 14C-choline into phosphatidylcholine; however, was not markedly different. Furthermore, prominent inclusion bodies were not observed either following modified Papanicolaou staining or through examination by standard transmission electron microscopy. The cell line is therefore certified as indicated below, but cannot be definitively characterized as of type II origin or function.
**Culture Medium:** Ham's F12K or DMEM + 10 % FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 100
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 23 | 8,10 | 8,11 | 14 | 16 | 11 | 8,11 | 13,14 | 11 | 11,12 | 13,17 | 28 | X,Y |

**ATCC Number:** CCL-185
**ECACC Number:** 86012804
**Reference:** Int J Cancer 1967, 17:62; J Nat Cancer Inst 1973, 51:1417.
**Karyology:** 2n=46, near triploid (hypotriploid) cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 2 \| 1 \| 1 \| 1 \| 1 \| 2 \| 9 \| 2 \| 3 \| 1 \| 2 \| 2 \| 1 |
|---|
| 45\|46\|47\|48\|51\|60\|63\|64\|65\|72\|79\|91\|92\|93 |

**Viability:** 87%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C138
**Designation:** RAJI TK-
**Species:** Human
**Tissue:** Hematopoietic

**Morphology:** Lymphoblast-like
**Description:** This cell line was derived from the maxillary lesion of a Burkitt's lymphoma patient.The cells are thymidine kinase deficient.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-6 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 19,27 | 6,7 | 8,13 | 16,19 | 15,16 | 10,13 | 10 | 14,15 | 13,16 | 8,11 | 17 | 27,30 | X,Y |

**ECACC Number:** 91112125
**Reference:** Lancet 1964, i:238.
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 5 \| 5 \|15\| 2 \| 1 \| 1 |
|---|
| 32\|46\|47\|48\|49\|50\|51 |

**Viability:** 90%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C139
**Designation:** Caco-2
**Species:** Human
**Tissue:** Colon
**Morphology:** Epithelial-like
**Description:** The Caco-2 cell line was isolated from a primary colonic tumor in a 72-year-old Caucasian male.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The addition of bovine insulin has proved useful where there has been slow growth of cells. The cell line was adapted to DMEM 1640 + 20% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO.
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.

**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 26
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 19 | 6 | 9,11 | 16,18 | 14,17 | 12,13 | 12,13 | 12,15 | 11,13,14 | 11,12 | 12 | 30 | X |

**ATCC Number:** HTB-37
**ECACC Number:** 86010202
**Reference:** J Nat Cancer Inst 1977, 58:209; J Nat Cancer Inst 1977, 59:221.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 3 \| 2 \| 1 \| 3 \| 1 \| 3 \| 2 \| 1 \| 1 \| 2 \| 1 \| 2 \| 1 \| 2 \| 1 \| '2' \| '1' |
|---|
| 74\|78\|79\|81\|82\|83\|85\|86\|87\|88\|89\|90\|91\|92\|93\|98\|106\|107 |

**Viability:** 85%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C140
**Designation:** NIP Gamma4
**Species:** Mouse
**Tissue:** Hematopoietic
**Description:** Chimeric Myeloma**.**
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Karyology:** near triploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 2 \| 2 \| 3 \| 1 \| 4 \| 3 \| 5 \| 1 \| 1 \| 1 |
|---|
| 31\|34\|45\|48\|53\|54\|55\|56\|58\|59\|60\|61\|62\|63\|74\|83 |

**Viability:** 80%, 5.1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C141
**Designation:** G-8
**Species:** Swiss-Webster mouse
**Tissue:** Muscle
**Morphology:** Myoblast-like
**Description:** G-8 is one of two clones isolated from a myogenic cell line which arose spontaneously in a culture of cells dissociated from the hind limb muscle of a fetal Swiss Webster mouse. The G-8 clone is non-tumorigenic and is highly sensitive to acetylcholine. When confluent, G-8 forms parallel arrays of spindle-shaped cells which fuse to form large multinucleated myotubules, possessing striations.
**Culture Medium:** DMEM + 10% horse serum + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split cofluent cultures 1:3 to 1:8, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1456
**ECACC Number:** 89050906
**Reference:** Science 1977, 196:995.
**Karyology:** 2n=40, Quasitriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **1** | **1** | **2** | **1** | **1** | **3** | **5** | **3** | **4** | **6** | **1** |
| **47** | **56** | **59** | **62** | **63** | **65** | **66** | **68** | **69** | **70** | **71** | **72** | **73** | **74** |

**Viability:** 85%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C142
**Designation:** NSO
**Species:** Mouse
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast
**Description:** NSO is a non-Ig-secreting, non-light chain synthesizing subclone of NS-1 (P3/NS1/1-Ag 4-1). The cells are resistant to 10 microgram azaguanine. Cells die in the presence of HAT medium.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml; 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 85110503
**Reference:** Methods in Enzymol 1981, 73B:3.
**Karyology:** 2n=40, near triploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **2** | **1** | **3** | **1** | **4** | **1** | **2** | **2** | **3** | **3** | **1** | **1** | **1** | **2** | **1** | **1** |
| **44** | **49** | **54** | **56** | **57** | **58** | **59** | **60** | **61** | **62** | **63** | **64** | **68** | **69** | **70** | **11** | **11** |

**Viability:** 95%, 2.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C143
**Designation:** COS-7
**Species:** African green monkey
**Tissue:** Kidney
**Morphology:** Fibroblast-like
**Description:** COS-7 is a fibroblast-like cell line established from CV-1 simian cells (ATCC CCL-70) which were transformed by an origin-defective mutant of SV40 which codes for wild-type T antigen. This line contains T antigen, retains complete permissiveness for lytic growth of SV40, supports the replication of ts A209 virus at 40`C and supports the replication of pure populations of SV40 mutants with deletions in the early region. This is a suitable host for transfection, especially for vectors requiring expression of SV40 T antigen. Handle as potentially biohazardous material under at least Biosafety level 2 containment.
**Culture Medium:** DMEM + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1651
**ECACC Number:** 87021302
**Reference:** Cell 1981, 23:175.
**Karyology:** 2n=60
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | |
|---|---|---|---|---|
| **1** | **9** | **19** | **1** | |
| **20** | **21** | **22** | **23** | |

**Viability:** 99%, 2.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C144
**Designation:** Hep2
**Species:** Human
**Tissue:** Larynx
**Morphology:** Epithelial-like
**Description:** The Hep2 cell line was established from tumors that had been produced in irradiated-cortisonized weanling rats after injection with epidermoid carcinoma tissue from the larynx of a 56-year-old Caucasian male. The in vitro isolation was accomplished in each of several mixtures of bovine amniotic fluid, embryo extracts, human and horse sera, and balanced salt solution, and the epithelial-like cells subsequently grew well in several types of culture media. It is a hardy cell line which resists temperature, nutritional and environmental changes without loss of viability. The Hep2 line supported growth of 10 of 14 arboviruses and measles virus. It has been used for experimental studies of tumor production in rats, hamsters, mice, embryonated eggs and volunteer terminal cancer patients.
**Culture Medium:** EMEM + 1% NEAA + 10% FBS. The cell line was adapted to RPMI + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**Passage No:** 178
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9,10 | 18,21 | 7 | 8,12 | 16,18 | 15,18 | 11,12 | 8,12 | 12,13 | 12,14 | 9,10 | 15 | 26,27 | X |

**ATCC Number:** CCL-23
**ECACC Number:** 86030501
**Reference:** Cancer Res 1954, 14:660; Cancer Res 1955, 15:598; Soc Exp Biol Med 1956, 193:107; Texas Rep Biol Med 1957, 15:588; Ann N.Y. Acad Sci 1958, 76:497.
**Karyology:** 2n=46, polyploid (hypertriploid) cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 4 \| 3 \| 5 \| 6 \| 3 \| 7 \| 1 \| 3 \| 1 \| 2 \| 1 |
|---|
| 56\|57\|61\|63\|65\|66\|67\|68\|69\|70\|72\|73\|74\|75\|83 |

**Viability:** 90%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C145
**Designation:** PLC/PRF/5
**Species:** Human
**Tissue:** Liver
**Morphology:** Epithelial-like
**Description:** Alexander cell line which produces HBsAg. The virus genome may be inducible in selective media. Handle cells under Biosafety level 2 containment. The cells Express c-ab1, c-fes, c-fms, c-myc, c-ha-ras and c-sis oncogenes.
**Culture Medium:** DMEM + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 19,26 | 8 | 9 | 15,16 | 15 | 12 | 9,11 | 13,17 | 11,12 | 13 | 16 | 30,33 | X |

**ATCC Number:** CRL-8024
**ECACC Number:** 85061113
**Reference:** Virology 1979, 32:796; Nature 1979, 282:615; Science 1983, 222:385; Proc Nat Acad Sci, USA 1985, 82:83; Science 1989, 209:497.
**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 1 \| 1 \| 2 \| 1 \| 1 \| 1 \| 1 \| 2 \| 2 \| 2 \| 1 \| 1 \| 1 \| 2 \| 4 \| 1 |
|---|
| 52\|57\|60\|61\|62\|64\|66\|70\|72\|73\|75\|77\|78\|79\|81\|86\|88 |

**Viability:** 85%, 1.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C146
**Designation:** SW 742
**Species:** Human
**Tissue:** Colon (colorectal)
**Morphology:** Epithelial-like
**Description:** Adenocarcinoma
**Culture Medium:** L-15 medium + 10% BCS. CO2 is not required for culturing. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures at 1:2 to1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 72
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | 24 | 8 | 11 | 16 | 15,16 | 13 | 8,9 | 14 | 12 | 12 | 13 | 29 | X |

**Reference:** Graefe's Arch Clin Exp Ophthalmol (1992)230:184-187
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 7 \| 2 \| 2 \| 3 \| 2 \| 2 \| 2 \| 4 \| 1 |
|---|
| 48\|49\|51\|54\|56\|57\|58\|59\|60\|61\|62\|66\|12 |

**Viability:** 99%, 3.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C147
**Designation:** MOUSE L CELLS (TK+, HBsAg+)
**Species:** Mouse
**Tissue:** Skin
**Morphology:** Fibroblast
**Description:** Mouse L cells carry a polyhedrin promotor from baculovirus which contains the herpes TK gene and that of the hepatitis B surface antigen (HBsAg).
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 1% Sodium pyruvate + 10% newborn calf serum. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 every 5 days, ie seeding at 4 x 10^4 cells/cm^2 using trypsin/EDTA, 5% CO2, 37`C, except when extracted from gaseaous phase liqiud nitrogen for one passage at 33`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 76
**ECACC Number:** 9011010
**Reference:** J Gen Virol 1991
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 2 \|10\| 3 \|13 |
|---|
| 37\|42\|45\|48\|49\|50 |

**Viability:** 86%, 1.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C148
**Designation:** WIL2.NS.6TG
**Species:** Human
**Tissue:** Spleen
**Morphology:** Lymphocyte-like
**Description:** WIL2.NS.6TG is a non Ig-secreting, HAT sensitive, 6-thioguanine resistant, human B lymphocyte cell line. This cell line was derived from the parent line WIL2.NS.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 5 x 10^3 to 5 x 10^4 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 93031001
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **5** | **13** | **7** | **5** | **6** | **2** | **1** | **1** |
| **45** | **46** | **47** | **48** | **49** | **51** | **53** | **58** |

**Viability:** 99%, 2.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C149
**Designation:** MOLT-4
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** MOLT-4 is a suspension culture derived from the peripheral blood of a 19-year-old male with acute lymphoblastic leukemia in relapse. It is reportedly a stable T-cell leukemia, the cells bind with sheep erythrocytes to form rosettes. The terminal deoxynucleotidyl transferase (TdT) activity of this cell line is high, neither immunoglobulins nor EBV were detectable.
**Culture Medium:** RPMI 1640 + 10% FBS

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 23,24, 25 | 6,7 | 8 | 17,19 | 15 | 12,13 | 9,13 | 13 | 11,12 | 10,13 | 13,17 | 30,33 | X |

**ATCC Number:** CRL-1582
**ECACC Number:** 85011413
**Reference:** J Nat Cancer Inst 1972, 49:891; Nature 1979, 279:243.
**Karyology:** 2n=46, hypotetraploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3** | **2** | **1** | **2** | **1** | **2** | **2** | **1** | **1** | **1** | **1** | **1** | **1** | **3** | **2** | **1** | **2** | **2** | **1** |
| **46** | **48** | **49** | **51** | **55** | **68** | **74** | **77** | **82** | **85** | **86** | **87** | **88** | **90** | **92** | **93** | **95** | **96** | **98** |

**Viability:** 85%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C150
**Designation:** HF2x653
**Species:** Human/mouse hybrid
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** Parent: WI-L2-729-HF2. Murine myeloma: P3X63/Ag8.653. This human x mouse heterohybridoma was generated by electro-acoustic fusion of the 2 lines. It is non-immunoglobulin secreting, HAT-sensitive, resistant to Ouabain at greater than 100 micro M, and will fuse with normal human lymphocytes and lymphoblastoids.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**ECACC Number:** 90012609
**Karyology:**
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 1 \|16\| 3 \| 3 \| 1 \| 2 \| 1 |
|---|
| 43\|44\|45\|46\|47\|48\|49\|52\|55 |

**Viability:** 96%, 4.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C151
**Designation:** U266 B1
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoid
**Description:** The U266 B1 cell line was established from the peripheral blood of a patient with an IgE myeloma (Epsilon 2, Lambda 2). These cells secrete IgE. The cell line is used as a fusion partner for hybridoma production.
**Culture Medium:** RPMI 1640 + 15% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22,26 | 6,10 | 8,11 | 14,16 | 16 | 13 | 10,12 | 12,13 | 11,13 | 12 | 13,14 | 27,29 | X |

**ATCC Number:** TIB-196
**ECACC Number:** 85051003
**Reference:** Clin Exp Immunol 1970, 7:477.
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 3 \| 2 \| 1 \| 3 \| 4 \| 3 \| 2 \| 1 \| 4 \| 2 \| 1 \| 1 |
|---|
| 47\|52\|53\|54\|55\|56\|57\|58\|59\|60\|62\|64\|65\|78 |

**Viability:** 94%, 3.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C152
**Designation:** KB
**Species:** Human
**Tissue:** Mouth
**Morphology:** Epithelial-like
**Description:** The KB cell line was derived from an epidermoid carcinoma in the mouth of an adult Caucasian male. It was one of the early successful attempts to isolate and serially propagate a human cell line directly in monolayer culture on glass. The line was isolated in a medium consisting of 90% basal medium (Eagle), and 10% human serum and in the course of 350 subsequent passages has been adapted to 5% calf serum. The KB line has been used extensively in studies of cell nutrition and metabolism, cancer chemotheraphy screening, tumorigenicity and viruses. KB cells have been reported to contain human papilloma virus 18 (HPV-18) sequences.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH, G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 375
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9,10 | 21 | 7 | 8,12 | 16,18 | 15,18 | 11,12 | 8,12 | 12,13 | 12,14 | 9,10 | 16 | 27,28 | X |

**ATCC Number:** CCL-17
**ECACC Number:** 94050408
**Reference:** Proc Soc Exp Biol Med 1955, 89:362; ibid 1956, 91: 361; ibid 1957, 94:661; Cancer Res 1958, 18:1017; Science 1961, 33:1559.
**Karyology:** 2n=46, near triploid to hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 3 \| 1 \| 1 \| 1 \| 2 \| 2 \| 1 \| 1 \| 1 \| 3 \| 1 \| 6 \| 1 \| 1 |
|---|
| 54\|56\|59\|60\|61\|62\|63\|64\|68\|70\|71\|72\|74\|75\|76\|77\|78\|81\|82 |

**Viability:** 100%, 3.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C153
**Designation:** PC12
**Species:** Rat
**Tissue:** Adrenal
**Morphology:** Neuronal fibroblasts or spherical clusters
**Description:** The PC12 single clonal cell line was established from a transplantable rat adrenal phaeochromocytoma. PC12 cells respond reversibly to NGF (nerve growth factor) by induction of the neuronal phenotype. The clonal cells synthesize and store the catecholamine neurotransmitters dopamine and norepinephrine, but not epinephrine. PC12 cells may be useful model systems for neurobiological and neurochemical studies.
**Culture Medium:** RPMI 1640 + 5% FBS + 10% horse serum.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Adheres poorly to plastic, grows in small clusters. Use collagen-coated flasks for attachment. Grows satisfactorily in suspension in untreated flasks. Maintain cultures at 2-5 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1721
**ECACC Number:** 88022401
**Reference:** Proc Nat Acad Sci, USA 1979, 73:2424; EMBO 1983, 2:643; Methods in Enzymology 1984, 1147:207; Science 1985, 229:393.
**Karyology:** 2n=42
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 2 \| 1 \| 1 \| 1 \| 2 \| 1 \| 1 \| 1 \| 2 \| 1 \| 1 \| 2 \| 5 \| 1 \| 1 \| 1 |
|---|
| 56\|62\|63\|64\|70\|71\|74\|75\|76\|78\|80\|81\|86\|87\|88\|89\|94\|97 |

**Viability:** 85%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C154
**Designation:** HT29/219
**Species:** Human
**Tissue:** Colon
**Morphology:** Epithelial-like
**Description:** Subclone of parent HT-29 which was established from adenocarcinoma from a 44-year-old Caucasian female. The cell line is tumorigenic in nude mice and has the ability to grow in agar.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 19,21 | 6,9 | 8,9 | 17,19 | 15,17 | 11,12 | 10 | 10 | 11 | 11,12 | 13 | 28,30 | X |

**ECACC Number:** 85061109
**Reference:** Fogh J Trempe, New Human Cell Line. In Human tumor cells in vitro, Plenum Press, New York 1975, pp115; J Nat Cancer Inst 1977, 58:1743; Proc Soc Exp Biol Med 1981, 166:107.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 4 \| 1 \| 2 \| 3 \| 4 \| 2 \| 2 \| 4 \| 1 \| 4 \| 1 \| 1 \| 1 |
|---|
| 50\|53\|56\|60\|62\|63\|64\|65\|66\|67\|68\|69\|70\|71\|72\|75 |

**Viability:** 90%, 2.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C155
**Designation:** NIH-3T3 D4
**Species:** NIH Swiss mouse
**Tissue:** Embryo
**Morphology:** Fibroblast-like
**Description:** The cell line shows serum batch specificity, therefore it is necessary to screen several batches of newborn calf serum before suitable one is found. NIH-3T3 D4 is highly sensitive to sarcoma virus focus formation and leukemia virus propagation and has proven to be very useful in DNA transfection studies. Sensitivity and specificity is comparable to those found with primary embryo cells.
**Culture Medium:** DMEM + 10% newborn calf serum. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:8 to 1:10, ie seeding at 2 x 10^3 to 2 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 85111801
**Reference:** J Virol 1969, 553:549; Cell 1979, 16:63.
**Karyology:** 2n=40, near triploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **1** | **4** | **1** | **1** | **1** | **1** | **3** | **6** | **6** | **2** | **1** | **'1'** |
| **53** | **55** | **56** | **57** | **58** | **61** | **62** | **63** | **64** | **65** | **66** | **68** | **69** | **72** | **103** |

**Viability:** 94%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C156
**Designation:** NIH 3T3
**Species:** NIH Swiss mouse
**Tissue:** Embryo
**Morphology:** Fibroblast-like
**Description:** The NIH-3T3, a continuous cell line of highly contact-inhibited cells, was established from NIH Swiss mouse embryo cultures in the same manner as the original random bred 3T3 and the inbred BALB/c 3T3. The established NIH 3T3 line was subjected to more than 5 serial cycles of subcloning in order to develop a subclone with morphologic

characteristics best suited for transformation assays. The NIH 3T3 is highly sensitive to sarcoma virus focus formation and leukemia virus propagation and has proven to be very useful in DNA transfection studies.
**Culture Medium:** DMEM + 10% CS. The cell line was adapted to RPMI 1640 + 10% CS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:6, ie seeding at 2-5 x 10^4 cells/cm^2 using trypsin or trypsin/EDTA, 5% CO2, 37`C. Do not allow culture to become fully confluent, the use of fetal calf serum is not recommended.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 135
**ATCC Number:** CRL-1658
**ECACC Number:** 93061524
**Reference:** J Virol 1969, 4:549; Cell 1979, 16:63; ibid 1979, 16:347.
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **2** | **2** | **2** | **3** | **4** | **6** | **3** | **5** | **1** | **1** | **1** |
| **52** | **72** | **74** | **75** | **76** | **77** | **78** | **79** | **80** | **81** | **82** | **84** |

**Viability:** 94%, 3.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C157
**Designation:** 60H9(9)D10.E6
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was derived from a patient with chronic Hepatitis C Type 1. This is an IgG1 secretory B cell line.The antibody is specific to non structural protein 4a (NS4a) of Hepatitis C virus. Fine specificity mapped to amino acid residues 1967-1708 of HCV deduced amino acid sequence. Use of 20 microgram/ml of IL-6 is recommended for optimal growth. Handle cells under Biosafety level 2 containment.
**Culture Medium:** RPMI 1640 + 1% NEAA + 1% Sodium pyruvate + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 94111519
**Reference:** J Immunol 1991, 147:2692.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | |
|---|---|---|---|---|
| **1** | **1** | **2** | **24** | **2** |
| **43** | **44** | **45** | **46** | **47** |

**Viability:** 91%, 5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C158
**Designation:** HEP G2
**Species:** Human
**Tissue:** Liver
**Morphology:** Epithelial-like
**Description:** This cell line was derived from liver tissue of a 15-year-old Caucasian male. The cells produce alpha-fetoprotein, albumin, alpha 2 macroglobulin, alpha 1-antitrypsin, transferrin, alpha1-antichymotrypsin, haptoglobin, ceruloplasmin, plasminogen, complement (C3 and C4), C3 activator, fibrinogen, alpha 1-acid glycoprotien, alpha 2HS glycoprotein, beta lipoprotein and retinol binding protein. There is no indication that this line harbors a HBV genome.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-3 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 22,25 | 9 | 8,9 | 17 | 15,16 | 11,12 | 10 | 15,16 | 9,13 | 12,13 | 13,14 | 29,31 | X,Y |

**ATCC Number:** HB-8065
**ECACC Number:** 85011430
**Reference:** Nature 1979, 282:615; Science 1980, 209:497; In Vitro Cell Dev Biol 1987, 23:349.
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 6 \| 7 \| 5 \| 7 \| 4 \| 7 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 |
|---|
| 44\|46\|48\|49\|50\|51\|52\|53\|84\|91\|92\|93\|96 |

**Viability:** 87%, 3.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources.The quoted information are provided by the depositors or the cell banks where the cell were purchased from; therefore, these sources are responsible for validity of the information .Passage numbers are given when applicable and should only be considered as a guide. Hence , NCBI dose not guarantee that the passage number of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C159
**Designation:** LCL-PI 1
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian adult.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C..
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 22,24 | 6 | 8,11 | 14,19 | 15,18 | 11,12 | 11,12 | 13,14 | 11 | 9,11 | 16,17 | 32,33 | X,Y |

**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 3 \|25\| 1 |
|---|
| 44\|45\|46\|47 |

**Viability:** 86%, 2.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C160
**Designation:** Luckes
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was derived from an African patient with Burkittes lymphoma. The cell line is EBV negative**.**
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C..
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 19,20 | 8,10,11 | 9 | 16,19 | 15,17 | 12 | 10 | 12 | 11,13 | 12,13 | 15 | 29,30 | X,Y |

**Reference:** Proc Nat Acad Sci 1981 78:1930-1934, Int J Cancer 1994 58:226-232..
**Karyology:** 2n=46, aneuploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 1 \|20\| 2 \| 3 \| 2 |
|---|
| 44\|45\|46\|47\|48\|49 |

**Viability:** 84%, 2.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C161
**Designation:** L929
**Species:** C34/An mouse
**Tissue:** Connective tissue
**Morphology:** Fibroblast-like
**Description:** The L929 cell line is a subclone of parental strain L, established by W R Earle in 1940 which is one of the first lines to be established in continuous culture. The L strain was derived from normal subcutaneous areolar and adipose tissue of 100-day-old male C34/An mouse. Cells are APRT+ and HPRT+. The cell line is permissive to PRV and VSV (indiana). Susceptibility to other viruses varies according to the culture medium used.
**Culture Medium:** DMEM + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split subconfluent cultures seeding at 5 x 10^3 to 2 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 85011425
**Reference:** J Nat Cancer Inst 1943, 4:165.
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **1** | **2** | **4** | **5** | **6** | **3** | **7** | **1** | **1** |
| **37** | **57** | **58** | **59** | **60** | **61** | **62** | **64** | **68** |

**Viability:** 90%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C162
**Designation:** 3T3 clone A31
**Species:** Mouse
**Tissue:** Embryo
**Morphology:** Fibroblast-like
**Description:** The BALB/3T3 clone A31 is one of several cell lines developed from disaggregated 14 to 17-day-old BALB/c mouse embryos. The BALB/3T3 clone A31 possesses many properties similar to 3T3 fibroblasts derived from random-bred Swiss-mouse embryos. The cells are extremely sensitive to contact inhibition of cell division, grow at a high dilution, exhibit a low saturation density and are highly susceptible to transformation in tissue culture by

the oncogenic DNA virus SV40 and murine sarcoma virus.The BALB/3T3 has been used in studies relating to in vitro properties associated with tumorigenicity, contact inhibition and viral transformation.
**Culture Medium:** DMEM + 5% newborn calf serum + 5% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:5 to 1:20, ie seeding at 5 x 10^3 to 2 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-163
**ECACC Number:** 86110401
**Reference:** J Cell Physiol 1968, 72:141; Science 1968, 162:1024; Virology 1969, 38:174; Exp Cell Res 1970, 59:137.
**Karyology:** 2n=40, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **1** | **5** | **3** | **4** | **3** | **1** | **1** | **1** | **1** |
| **38** | **56** | **58** | **62** | **65** | **66** | **67** | **68** | **69** | **70** | **72** | **74** | **99** |

**Viability:** 78%, 1.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local anleukemiad world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information. leukemia

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**NCBI Code:** C163
**Designation:** HFFF2
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** HFFF2 was derived from the foreskin of a 14 to 18-week-old Caucasian fetus. The cells support the growth of CMV and HSV.
**Culture Medium:** DMEM + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 10
**ECACC Number:** 86031405

**Reference:** Vaccine 2002 20:2215-2220, Iranian Biomedical Journal 2003 7(4):147-153.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \|26\| 1 |
|---|
| 44\|45\|46\|47 |

**Viability:** 99%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C164
**Designation:** GC-1spg
**Species:** Mouse
**Tissue:** Testis
**Morphology:** Epithelial-like
**Description:** The GC-1spg is a germ cell line derived from testes of a 10-day-old prepuberal BALB/c mouse. Spermatogonia type B cells obtained by fractionation were transfected with plasmid pSV3-neo coding for the immortalizing SV40 large T antigen and resistance to neomycin. After transfection the cells were selected with G-418. They have an integrated pSV3-neo plasmid in their genome and the large SV40 T antigen gene is stably integrated. GC-1spg expresses two testis-specific isoproteins cytochrome c and lactate dehydrogenase-C4. Handle as potentially biohazardous material under at least Biosafety level 2 containment.
**Culture Medium:** DMEM + 1mM Sodium pyruvate +10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2053
**Reference:** Exp Cell Res 1992, 201:417.
**Karyology:** 2n=40,Near tetraploid
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 1 \| 1 \| 1 \| 1 \| 5 \| 1 \| 3 \| 3 \| 3 \| 2 \| 1 \| 2 \| 1 \| 1 \| 1 |
|---|
| 53\|62\|64\|66\|80\|81\|82\|83\|84\|85\|86\|87\|88\|89\|93\|94\|97 |

**Viability:** 90%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide

sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C165
**Designation:** HGF1-PI 1
**Species:** Human
**Tissue:** Gingiva
**Morphology:** Fibroblast-like
**Description:** The HGF1-PI 1 cell line was derived from an explant culture of gingival biopsy taken from a normal 28-year-old Caucasian female in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:4, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C..
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 7
**Reference:** Journal of Endodontics 2000 26(8):462-465.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | |
|---|---|---|
| **1** | **1** | **28** |
| **44** | **45** | **46** |

**Viability:** 89%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C166
**Designation:** HGF2 PI 2
**Species:** Human
**Tissue:** Gingiva
**Morphology:** Fibroblast-like
**Description:** The HGF2 PI 2 cell line was initiated from an explant culture of a ginigival

biopsy in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:4, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Clin Periodontol 2004 31:160-165.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | |
|---|---|---|---|---|
| **1** | **1** | **24** | **1** | **1** |
| **41** | **42** | **46** | **47** | **49** |

**Viability:** 99%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C167
**Designation:** HFSF-PI 3
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** The HFSF-PI 3 cell line was derived from skin of a 14-week-old fetus in NCBI.
**Culture Medium:** RPMI 1640 +10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 8
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 24,28,31 | 9,10 | 8,9 | 17,19 | 17,20 | 13 | 10,12 | 14,15 | 8,12 | 9,10 | 14,16 | 31 | X |

**Reference:** Iranian Biomedical Journal 2003 7(4):147-153.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | |
|---|---|---|---|
| **1** | **2** | **26** | **1** |
| **43** | **45** | **46** | **48** |

**Viability:** 98%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C168
**Designation:** HFLF-PI 4
**Species:** Human
**Tissue:** Liver
**Morphology:** Fibroblast-like
**Description:** The HFLF-PI 4 cell line was obtained from the liver of a 14-week-old fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 10
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 24,28,31 | 9,10 | 8,9 | 17,19 | 17,20 | 13 | 10,12 | 14,15 | 8,12 | 9,10 | 15,16 | 30 | X |

**Reference:** Iranian Biomedical Journal 2003 7(4):147-153.
**Viability:** 94%, 1.1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C169
**Designation:** HFLF-PI 5
**Species:** Human
**Tissue:** Lung
**Morphology:** Fibroblast-like
**Description:** The HFLF-PI 5 cell line was derived from the lung tissue of a 14-week-old fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 10
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 24,28,31 | 9,10 | 8,9 | 17,19 | 17,20 | 13 | 9,12 | 14,15 | 8,12 | 9,10 | 14,16 | 30 | X |

**Reference:** Iranian Biomedical Journal 2003 7(4):147-153.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|29 |
|---|
| 45\|46 |

**Viability:** 98%, 1.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C170
**Designation:** HFFF-PI 6
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** The HFFF-PI 6 cell line was obtained from the foreskin of a 16-week-old male fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:6, ie seeding at 2-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 5
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 24,28,31 | 9,10 | 8,9 | 17,19 | 17,20 | 13 | 10,12 | 14,15 | 8,12 | 9,10 | 15,16 | 30 | X |

**Reference:** Vaccine 2002 20:2215-2220, Iranian Biomedical Journal 2003 7(4):147-153.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 2 \| 2 \| 2 \|21\| 1 |
|---|
| 36\|42\|43\|44\|45\|46\|48 |

**Viability:** 99%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C171
**Designation:** HBMF-SPH
**Species:** Human
**Tissue:** Bone marrow
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from human bone marrow in NCBI.

**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 5
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **2** | **1** | **1** | **1** | **1** | **5** | **1** | **3** | **3** | **3** | **2** | **1** | **2** | **1** | **1** | **1** |
| **53** | **62** | **64** | **66** | **80** | **81** | **82** | **83** | **84** | **85** | **86** | **87** | **88** | **89** | **93** | **94** | **97** |

**Viability:** 90%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C172
**Designation:** HNFF-PI 8
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** This cell line was obtained from the foreskin of a male newborn in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 5
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | |
|---|---|---|---|---|
| **1** | **1** | **22** | **4** | **1** |
| **44** | **45** | **46** | **47** | **48** |

**Viability:** 88%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the

information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C173
**Designation:** LCL-PI 4
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an adult healthly Iranian female.
**Culture Medium:** RPMI 1640 +10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 23,26 | 7,9 | 9,11 | 17,18 | 16,18 | 12,14 | 11 | 13,15 | 8,11 | 10,12 | 12 | 29,31 | X |

**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \|28 |
|---|
| 44\|45\|46 |

**Viability:** 90%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C174
**Designation:** LCL-PI 5
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like

**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood of a 29-year-old healthy Iranian male.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 1 x 10^5 to 1 x 10^6 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **29** | **1** |
| **46** | **47** |

**Viability:** 96%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C175
**Designation:** LCL-PI 7
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an adult healthy male.
**Culture Medium:** RPMI 1640 +10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 84%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C176
**Designation:** LCL-PI 8
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an adult healthy Iranian male.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| |
|---|
| **1 \|29** |
| **45\|46** |

**Viability:** 98.2%, 3.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C177
**Designation:** LCL-PI 11
**Species:** Human
**Tissue:** Liver
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from fetal liver lymphocytes.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| |
|---|
| **1 \| 1 \|28** |
| **43\|45\|46** |

**Viability:** 88%, 3.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C178
**Designation:** LCL-PI 12
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the cord blood lymphocytes.
**Culture Medium:** RPMI 1640 +10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 19 | 6 | 7,8 | 15,18 | 15,17 | 10,12 | 11,12 | 15,16 | 12,13 | 10,11 | 15,18 | 27,28 | X |

**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **3 \|33\| 1 \| 1 \| 1 \| 1** |
|---|
| **45\|46\|47\|55\|67\|13** |

**Viability:** 97%, 3.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C180
**Designation:** T45
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** T 45 is a T lymphoid cell line derived from a patient with T cell acute lymphoblastic leukemia.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 21,22 | 9 | 8 | 14,17 | 14,15 | 11,12 | 7,10 | 11,15 | 9,14 | 9,12 | 15,16 | 29,31 | X,Y |

**Reference:** Proc. Nati. Acad. Sci. USA Vol. 85, pp. 9229-9233, December 1988 Medical Sciences
**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 2 \| 3 \| 6 \| 3 \| 5 \| 3 \| 1 \| 1 \| 3 |
|---|
| 68\|75\|76\|78\|79\|80\|81\|82\|83\|84\|85\|86 |

**Viability:** 99%, 4.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C181
**Designation:** KE-37
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** KE-37 is a T lymphoid cell line derived from a patient with T cell acute lymphoblastic leukemia.
**Culture Medium:** RPMI 1640 + 10% FBS.

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11,13 | 22,23 | 6,7 | 8 | 18,20 | 13,14 | 13,15 | 11,15 | 13,16 | 9,10 | 10,13 | 14,17 | 29,33 | X |

**ECACC Number:** DSMZ no.:ACC 46
**Reference:** Drexler et al., Leuk Res 9: 209-229 (1985), PubMed ID 2985879
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 2 \|23\| 1 \| 1 \| 1 |
|---|
| 43\|44\|46\|49\|50\|54 |

**Viability:** 98%, 2.6 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C182
**Designation:** SKW3
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** SKW3 is a T lymphoid cell line derived from a patient with T cell chronic lymphoblastic leukemia.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 24,25 | 6,10 | 8 | 17,18 | 15,18 | 12,13 | 8,11 | 11,14 | 10,12 | 11,12 | 13,17 | 27,30 | X,Y |

**ECACC Number:** DSMZ no.: ACC 53
**Reference:** Hirono et al., J Immunol 123: 1133-1140 (1979), PubMed ID 313946
**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **1** | **1** | **4** | **1** | **1** | **2** | **1** | **3** | **2** | **3** | **3** | **2** |
| **67** | **70** | **73** | **76** | **77** | **78** | **79** | **80** | **81** | **83** | **84** | **85** | **86** | **87** | **88** | **89** |

**Viability:** 90%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C183
**Designation:** DND 41
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** Esablished from the prripheral blood of 13-year -old boy with T-acute lymphoblastic leukemia (T-ALL ; Type III cortical) in 1977 ; described to carry P15INK4B/P16INK4A deletions and p53 mutation.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split saturated culture 1:2 to 1:4 every 2-4 days; seed out at ca. 0.5-1.0 x 1 cells/ml;maintain at ca.0.3-1.0 x 10^6 cells/ml;maximal density of ca.2 x 1 cells/ml
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** DSMZ no:ACC 525
**Reference:** Drexler et al.,Leuk Res 9:209-229(1985),PubMed ID 2985879
**Viability:** 98%, 6.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C184
**Designation:** RPMI 8402
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** RPMI 8402 is a T lymphoid cell line derived from a 16-year-old female with relapsed acute lymphoblastic leukemia. These cells have a reported doubling time of 24-30 hr, form rosettes with unsensitized sheep red blood cells and are compelement receptor positive. The cell line exhibits high terminal deoxynucleotidyl transferase activity.
**Culture Medium:** Iscove's modified Dulbecco's medium + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1994
**ECACC Number:** DSMZ no.: ACC 290
**Reference:** J Nat Cancer Inst 1974, 54:557; ibid 1975, 55:11.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | |
|---|---|---|---|---|---|---|
| **1** | **3** | **7** | **11** | **5** | **2** | **1** |
| **41** | **43** | **45** | **46** | **47** | **49** | **50** |

**Viability:** 97%, 1.9 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C185
**Designation:** HUT-78
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** The HUT-78 cell line was derived from peripheral blood of a 50-year-old Caucasian male patient with Sezary syndrome. The cells exhibit features of a mature T cell line with inducer/helper phenotype and release T cell growth factor (IL-2). Biologically active IL-2 could also be eluted from the surface of these cells and subcellular fractionation showed that

almost all the IL-2 activity was associated with the plasma membrane. Growth rate can be increased by the addition of IL-2.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/mI, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 24,25 | 6,7 | 9 | 17,19 | 14,15 | 13,14 | 9,14 | 13 | 11,12 | 11,13 | 14,18 | 30,34 | X |

**ATCC Number:** TIB-161
**ECACC Number:** 88041901
**Reference:** J Exp Med 1981, 154:1403; J Nat Cancer Inst 1992, 84:1922.
**Karyology:** 2n=46, hyperdiploid-hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **4** | **1** | **1** | **1** | **1** | **4** | **1** | **1** | **2** | **3** | **2** | **1** | **2** | **2** | **1** | **1** | **1** | **1** |
| **46** | **50** | **51** | **53** | **54** | **62** | **63** | **71** | **72** | **74** | **75** | **80** | **81** | **82** | **83** | **84** | **85** | **89** |

**Viability:** 94%, 5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C186
**Designation:** RAEL
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was derived from an African patient with Burkittes lymphoma.The cells are infected with EBV and display t(8:14) chromosomal translocation.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**Reference:** J Virol, Apr. 1998: 2969–2974, Int J Cancer 1994 58:226-232.
**Karyology:** 2n=46, hypodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 3 \|12\| 3 \| 9 \| 1 \| 1 |
|---|
| 42\|43\|44\|45\|46\|81\|87 |

**Viability:** 94%, 4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C187
**Designation:** CRI-D2
**Species:** NEDH rat
**Tissue:** Pancreas
**Morphology:** Epithelial-like
**Description:** CRI-D2 was derived from the islands of langerhance of a NEDH rat transplantable islet cell tumor. Cells secrete insulin and glucagon. The cells tend to grow in clumps.
**Culture Medium:** DMEM + 5-10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 3-5 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 88031605
**Reference:** J Endocrinol 1986, 109:193.
**Karyology:** 2n=42
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 1 \| 1 \| 7 \| 3 \| 4 \| 7 \| 1 \| 1 \| 1 \| 1 |
|---|
| 65\|67\|68\|69\|70\|71\|72\|74\|75\|76\|78\|79 |

**Viability:** 95%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C188
**Designation:** BAE-1
**Species:** Bovine/cow
**Tissue:** Aorta
**Morphology:** Endothelial-like
**Description:** This cell line was derived from the aorta of Fresian cow. Cells form sprouts after confluence and are infected with Bovine Viral Diarrhea Virus (BVDV) which is a common contaminant of ruminants and is non-hazardous to humans. The cells secrete proteoglycans and collagen.
**Culture Medium:** DMEM or RPMI 1640 + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 25
**ECACC Number:** 88031149
**Reference:** Proc Nat Acad Sci, USA 1978, 75:2621.
**Karyology:** 2n=60
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **1** | **3** | **1** | **1** | **1** | **1** | **10** | **11** | **1** | |
| **52** | **53** | **54** | **55** | **56** | **58** | **59** | **60** | **61** | |

**Viability:** 99%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C190
**Designation:** HF2FF-PI 14
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like

**Description:** This cell line was derived from human fetal foreskin in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Viability:** 99%, 1.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C192
**Designation:** HSF-PI 16
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from skin of a 3-year-old Caucasian female in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 5 \| 9 \| 2 \| 3 \| 2 \| 1 \| 1** |
|---|
| **38\|40\|41\|42\|43\|44\|45\|46\|47\|48\|49\|51\|59** |

**Viability:** 99%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C193
**Designation:** HSF-PI 17
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from skin of a 3-year-old Caucasian female in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 3
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | |
|---|---|---|
| **1** | **1** | **28** |
| **43** | **45** | **46** |

**Viability:** 99%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C194
**Designation:** HSF-PI 18
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from skin of a 30-year-old Caucasian female in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C..
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 3
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | |
|---|---|---|
| **1** | **28** | **1** |
| **44** | **46** | **47** |

**Viability:** 99%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C195
**Designation:** HSF-PI 19
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from skin of a 70-year-old Caucasian female in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | |
|---|---|---|
| **1** | **2** | **27** |
| **43** | **45** | **46** |

**Viability:** 99%, 1.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C196
**Designation:** HN5
**Species:** Human
**Tissue:** Head and neck
**Description:** Head and neck carcinoma.
**Culture Medium:** DMEM + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO

**Isoenzymes**LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 24 | 9 | 8,11 | 15,18, 19 | 18 | 13 | 11 | 11,12 | 11 | 10,12 | 12,14 | 27,31 | X |

**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **1 \| 2 \| 1 \| 1 \| 1 \| 1 \| 2 \| 1 \| 2 \| 2 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| '1' \| '1' \| '1' \| '1' \| '1' \| '1' \| '2' \| '1'** |
|---|
| **44\|53\|54\|54\|57\|59\|62\|63\|64\|68\|69\|72\|73\|89\|92\|94\|98\|103\|105\|106\|107\|114\|117\|128\|134** |

**Viability:** 96%, 2.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C197
**Designation:** F3B6
**Species:** Human x Mouse
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like.
**Description:** The F3B6 cell line is a heterohybrid produced by fusing NS-1 myeloma cells with human peripheral blood B lymphocytes. The cells are resistant to 6-thioguanine. This line is suitable for fusing to human B cells for the production of human monoclonal antibodies.
**Culture Medium:** HL-1 medium + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** HB-8785
**Reference:** 3598: Larrick JW, Raubitschek AA. Pseudomonas aeruginosa exotoxin A antibodies, their preparation and use. US Patent 4,677,070 dated Jun 30 1987.
**Karyology:**
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 3 \| 2 \| 3 \|19\| 2 |
|---|
| 50\|52\|53\|54\|55\|56 |

**Viability:** 98%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C199
**Designation:** Y-1
**Species:** Mouse
**Tissue:** Adrenal cortex
**Morphology:** Epithelial-like
**Description:** Clone Y-1, a steroid-secreting cell strain, was initiated from an adrenal cortex tumor of a male LAF1 mouse. The Y-1 strain was cloned from earlier cultures established after alternate passage of the cells as tumors in animals and in cell culture. Epithelial cell clones which were isolated produced steroid hormones at a high rate ( 4 microgram/mg protein/hr) under maximal ACTH stimulation. Adrenal tumor clones seem to be functional indefinitely when cultured with a high serum-containing medium. The secreted steroid hormones contain a 2-hydroxy group at carbon 20 instead of the usual keto function which is believed to be due to conditions of culture.
**Culture Medium:** Ham's F10 + 15% horse serum + 2.5% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% C02, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-79
**ECACC Number:** 85062807
**Reference:** Proc Soc Exp Biol Med 1957, 95:304; Am J Pathol 1957, 33:631; Proc Nat Acad Sci, USA 1962, 48:1184; Cancer Res 1966, 26:529.
**Karyology:** 2n=40, aneuploid cell line, double minutes present in most of the cells.

**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 1 \| 1 \|11\| 5 \| 4 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 |
|---|
| 32\|33\|35\|36\|37\|38\|39\|40\|41\|43\|54\|59\|77 |

**Viability:** 86%, 6 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C200
**Designation:** WEHI-164
**Species:** BALB/c mouse
**Tissue:** Muscle
**Morphology:** Fibroblast-like
**Description:** The WEHI-164 cell line was established from a fibrosarcoma induced by subcutaneous injection of 3-methyl cholanthrene in BALB/c mice. The transprantable tumor was trypsinized and recovered cells were first propagated in Dulbecco's modified Eagle's minimum essential medium with 10% FBS. The line is highly sensitive, after pretreatment with actinomycin D, to human cytotoxic monocytes, human tumor necrosis factor and lymphotoxin. It provides convenient target cells for short-term chromium release assays.
**Culture Medium:** DMEM + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1751
**ECACC Number:** 87022501
**Reference:** Proc Soc Exp Biol Med 1973, 144:813.
**Karyology:** 2n=40, Hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 5 \| 2 \| 2 \| 1 \| 4 \| 2 \| 2** |
|---|
| **50\|58\|59\|63\|64\|67\|68\|69\|70\|71\|72\|73\|74\|75\|76** |

**Viability:** 99%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C201
**Designation:** Y79
**Species:** Human
**Tissue:** Eye
**Morphology:** Multicellular clusters
**Description:** The Y79 cell line was isolated by explant culture of a primary tumor from the right eye of a 2.5-year-old Caucasian female obtained immediately after enucleation. The donor had a strong maternal family history of retinoblastoma. The cell line grew as a suspension of cell cultuers. Ultrastructural features including nuclear membrane infoldings, triple membrane structures, microtubules large coated vesicles, centrioles, basal bodies and annulate lamellae were reportedly similar to those of the original tumor. No viral particles were observed but reverse transcriptase activity like that of RNA tumor viruses was demonstrated.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 4-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplsma, bacteria and fungi were negative.
**ATCC Number:** HTB-18
**ECACC Number:** 86093003
**Reference:** J Nat Cancer Res 1974, 53:347.
**Karyology:** 2n=46, pseudodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **2** | **2** | **2** | **3** | **1** | **3** | **9** | **2** | **1** | **1** | **1** | **1** | **1** |
| **27** | **34** | **36** | **39** | **42** | **44** | **45** | **46** | **48** | **50** | **54** | **62** | **70** | **84** |

**Viability:** 90%, 5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C202
**Designation:** CHSE-214
**Species:** Salmon (Oncorhynchus tshawytscha)
**Tissue:** Embryo
**Morphology:** Fibroblast-like
**Description:** The CHSE-214 cell line was derived from a Chinook Salmon embryo. The cells are susceptible to a wide range of fish viruses and in many instances replicate high titers. The

optimum temperature is 21ºC.
**Culture Medium:** EMEM (EBSS) + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:4 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.1% trypsin plus 0.02% EDTA, cells detach after 5-10 minutes at room temperature, 5% CO2, 21`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 235
**ATCC Number:** CRL-1681
**ECACC Number:** 91041114
**Reference:** Ann NY Acad Sci 1965;126:566-586In Vitro 1984;20:671-676
**Viability:** 99%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C203
**Designation:** T-47D
**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial-like, tendency to multilayer
**Description:** The T-47D cell line was isolated from a pleural effusion obtained from a 54-year-old female patient with an infiltrating ductal carcinoma of the breast. This differentiated epithelial substrain (T-47D) was found to contain cytoplasmic junctions and receptors to 17-betaestradiol, other steroids and calcitonin. It will form colonies in soft agar.
**Culture Medium:** RPMI 1640 or DMEM + insulin + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11,13 | 23 | 6 | 11 | 14 | 15,17 | 12 | 11 | 13 | 12 | 10 | 17 | 28,31 | X |

**ATCC Number:** HTB-133™
**Reference:** Biochem Biophys Res Commun 1981, 101:1131; Biochem J 1981, 200:315; J Biol Chem 1981, 256:12269.
**Karyology:** 2n=46, hypotriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **2** | **1** | **1** | **1** | **1** | **4** | **1** | **1** | **2** | **2** | **4** | **3** | **1** | **3** | **1** |
| **42** | **49** | **50** | **51** | **52** | **54** | **55** | **56** | **59** | **60** | **61** | **62** | **63** | **64** | **65** | **66** | **67** |

**Viability:** 90%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C204
**Designation:** A-431
**Species:** Human
**Tissue:** Skin
**Morphology:** Epithelial-like
**Description:** The epidermoid carcinoma cell line A431, was derived from an 85-year-old female with epidermal carcinoma. The cell line produced rapidly growing subcutaneous tumors in anti-thymocyte serum-treated NIH Swiss mice and formed colonies on normal fibroblasts and in agar. The cells carry large numbers of EGF binding sites.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + (Bovine insulin-optional) + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C .
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 20 | 9 | 11 | 15,17 | 14 | 12,13 | 10 | 13 | 9,13 | 12,14 | 13,17 | 28,30 | X |

**ATCC Number:** CRL-1555
**ECACC Number:** 85090402
**Reference:** J Nat Cancer Inst 1973, 51:1417.

**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 4 \| 1 \| 5 \| 2 \| 5 \| 3 \| 2 \| 2 \| 1 \| 1 \| 1 |
|---|
| 52\|62\|64\|66\|67\|68\|69\|70\|71\|72\|74\|76\|78\|82 |

**Viability:** 86%, 2.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C206
**Designation:** ACHN
**Species:** Human
**Tissue:** Kidney
**Morphology:** Fibroblast-like
**Description:** This line was initiated from the malignant pleural effusion of a 22-year-old Caucasian male with widely metastatic renal adenocarcinoma (autopsy confirmed). Subcutaneous inoculation of cells into nude mice produced palpable locally invasive tumors after 4 weeks. Both the original cells (ACHN) and those recoverd from nude mouse tumors were growth-inhibited by human interferons. ACHN may be of use for antiproliferative studies using human interferons or interferon inducers.
**Culture Medium:** MEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 1-2 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22 | 7,8 | 8,11 | 16,17 | 17 | 12 | 9,11 | 12 | 12 | 11,12 | 12 | 29 | X |

**ATCC Number:** CRL-1611
**ECACC Number:** 88100508
**Reference:** 91982: Kochevar J. Blockage of autonomous growth of ACHN cells by anti-renal cell carcinoma monoclonal antibody 5F4. Cancer Res. 20: 2968-2972, 1990. PubMed:

2334900
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 5 \| 3 \| 2 \| 3 \| 6 \| 3 \| 1 \| 2 \| 1 \| 1 \| 1 |
|---|
| 43\|44\|46\|49\|50\|51\|52\|53\|55\|56\|62\|65\|70 |

**Viability:** 99%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C207
**Designation:** SK-BR-3
**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial-like
**Description:** This cell line was derived from a pleural effusion. Initial cultivation was in EMEM with 10% FBS and more recently McCoys 5a with 10-15% FBS.
**Culture Medium:** McCoys 5a + 10% FBS. The cell line was adapted to RPMI + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 20 | 8,9 | 8,11 | 17 | 17 | 9,12 | 9,12 | 13 | 11,12 | 9 | 10,13 | 30 | X |

**ATCC Number:** HTB-30
**Reference:** 21869: . Human tumor cells in vitro. New York: Plenum Press; 1975. 22468: Trempe GL. Human breast cancer in culture. Recent Results Cancer Res. 57: 33-41, 1976. PubMed: 1013510
**Karyology:** 2n=46, hypertriploid (near tetraploid)
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 1 \| 3 \| 1 \| 1 \| 1 \| 4 \| 1 \| 1 \| 1 \| 2 \| 1 \| '1' \| '1' \| '1' \| '1' |
|---|

| 49\|50\|52\|64\|71\|72\|75\|76\|77\|78\|79\|80\|81\|82\|84\|86\|88\|90\|92\|100\|105\|127\|161 |
|---|

**Viability:** 93%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C208
**Designation:** MDA-MB-468
**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial-like
**Description:** The MDA-MB-468 cell line was isolated from a pleural effusion of a 51-year-old Negro patient with metastatic adenocarcinoma of the breast. MDA-MB-468 was reportedly tumorigenic in nude mice.
**Culture Medium:** Leibovitz's L-15 medium + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 3-6 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22 | 7 | 8,9 | 18 | 15 | 12 | 7 | 13 | 12 | 9 | 17 | 26,27 | X |

**ATCC Number:** HTB-132
**Reference:** In Vitro 1978, 4:911; J Nat Cancer Inst 1979, 62:263; Cancer Res 1980, 40:3118.
**Karyology:** 2n=46, (hypo-) neartriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 2 \| 1 \| 2 \| 3 \|14\| 3 \| 2 \| 1 \| 1 |
|---|
| 46\|57\|59\|60\|61\|62\|63\|64\|66\|72 |

**Viability:** 94%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the

information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C209
**Designation:** SK-OV-3
**Species:** Human
**Tissue:** Ovary
**Morphology:** Epithelial-like
**Description:** This cell line was derived from the ascitic fluid of a 64-year-old Caucasian female with an ovarian tumor. It forms moderately well-differentiated adenocarcinoma consistent with ovarian primary.
**Culture Medium:** McCoy's 5a +10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:3, ie seeding at 3-6 x 10^4 cells/cm^2, using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 24,26 | 9,10 | 8,11 | 17 | 14 | 11 | 13,14 | 14,15 | 8,11 | 12 | 16,17 | 30,31 | X |

**ATCC Number:** HTB-77
**ECACC Number:** 91091004
**Reference:** Human tumor cells in vitro1975, Plenum Press, New York, pp 155; J Nat Cancer Inst 1977, 58:209.
**Karyology:** 2n=46, tetraploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **1 \| 1 \| 1 \| 2 \| 1 \| 2 \| 1 \| 1 \| 2 \| 1 \| 2 \| 1 \| 1 \| 1 \| 1 \| '1' \| '1' \| '1' \| '1' \| '1' \| '1' \| '1' \| '1' \| '1' \| '1'** |
| **57\|60\|64\|73\|75\|77\|80\|81\|86\|88\|92\|93\|96\|98\|99\|101\|103\|112\|113\|114\|116\|120\|122\|130\|136** |

**Viability:** 90%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C210
**Designation:** RPMI 8226
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** lymphoblast, Suspension
**Description:** Derived from the peripheral blood of a 61 year old male with multiple myeloma. The cells produce and secrete Ig lambda light chain.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 5 X 10(5) viable cells/ml.Do not allow the cell density to exceed 2 to 3 X 10(6) cells/ml. Interval: Maintain cell density between 5 X 10(5) and 2 X 10(6) viable cells/ml. Medium Renewal: Every 2 to 3 days.5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22,23 | 10 | 8,11 | 14,16 | 15,16 | 12 | 11,12 | 12,14 | 10,14 | 11 | 12,15 | 27,29 | X |

**ECACC Number:**
**Reference:** Proc Soc Exp Biol Med 1976, 125:1246.
**Karyology:** 2n=46, near diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \|20\| 1 \| 1 \| 1 \| 1 \| 1 \| '1' |
|---|
| 45\|46\|48\|51\|53\|69\|75\|110 |

**Viability:** 97%, 3.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C211
**Designation:** A172
**Species:** Human
**Tissue:** Brain
**Morphology:** Continuous culture, grown as monolayer, morphology glial**.**
**Description:** The A172 cell line was derived from a glioblastoma removed from a 53-year-old male. The cell line was non-tumorigenic in anti-thymocyte, serum treated NIH Swiss mice.
**Culture Medium:** DMEM + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:8, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9,11 | 20,22 | 6,10 | 8,11 | 20 | 15,18 | 11,12 | 11 | 13,14 | 11 | 11 | 12,13 | 27,32 | X,Y |

**ATCC Number:** CRL-1620
**ECACC Number:** 88062428
**Reference:** J Nat Cancer Inst 1973, 51:1417.
**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 3 \| 2 \| 6 \| 1 \| 2 \| 2** | |
| **48\|58\|59\|61\|62\|65\|66\|72\|74\|75\|76\|77\|78\|79\|80\|81\|82\|84\|86\|88** | |

**Viability:** 95%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C212
**Designation:** Nalm-6
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphocyte-like

**Description:** Established from the peripheral blood of a 19-year-old man with acute lymphoblastic leukemia (ALL) in relapse in 1976.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** maintain at 1.0-2.0 x 10^6 cells/ml;split ratio of 1:2 to 1:3 every 3 days; 37C with 5%CO2
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| . | | 13 | 19,22, 23 | 8,9 | 8,11 | 15,16 | 15,16 | 11,13 | 8,11 | 11,15 | 9,13 | 10,11 | 12,15 |

**ECACC Number:** DSMZ no: ACC 128
**Reference:** Hurwitz et al.,Int J Cancer 23:174-180(1979),PubMed ID 83966
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 5 \| 1 \|23 |
|---|
| 43\|44\|45\|46 |

**Viability:** 99%, 8.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C213
**Designation:** HPB-ALL
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was derived from a Tcell acute lymphoblastic leukemia.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/mI, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9,10 | 20,23 | 7,9 | 8,11 | 17,19 | 16,17 | 11 | 11 | 11,12 | 8,10 | 8,10 | 14,18 | 29 | X |

**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 3 \| 1 \| 1 \| 4 \| 1 \| 1 \| 1 \| 3 \| 1 |
|---|
| 53\|64\|65\|73\|78\|79\|80\|81\|82\|83\|84\|85\|86\|88\|89\|90\|91\|94\|95 |

**Viability:** 98%, 3.1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C214
**Designation:** MDA-MB 453
**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial-like patches, single spheres
**Description:** MDA-MB 453 was derived from an effusion of a 48-year-old patient with metastatic carcinoma of the breast, involving the nodes, brain and pleural and pericardial cavities. The cells grew as singles or loosely attached groups with some epithelial-like patches. They were reportedly not tumorigenic in nude mice.
**Culture Medium:** Leibovitz's L-15 medium + 10% FBS. The cell line was adapted to RPMI + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 3-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C..
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 18,23 | 6 | 11 | 17,18 | 15 | 11 | 10 | 10,12 | 11 | 9 | 14,19 | 28,30 | X |

**ATCC Number:** HTB-131
**Reference:** In Vitro 1978, 14:911; Cancer Res 1979, 39:919; Cancer Res 1980, 40:3118.
**Karyology:** 2n=46, hypotetraploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 1 \| 3 \| 2 \| 3 \| 2 \| 4 \| 2 \| 1 \| 1 \| 1 |
|---|
| 54\|61\|64\|74\|75\|76\|79\|81\|84\|85\|86\|87\|88\|89\|90\|92\|94\|95\|96 |

**Viability:** 96%, 2.9 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C215
**Designation:** WM1-LCL-PI 13
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the spleen lymphocytes of a 45-year-old male patient with Waldenstrom's macroglobulinemia.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Karyology:** 2n=46, aneuploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \|10\|14\| 1 \| 1 \| 1 |
|---|
| 41\|42\|46\|47\|48\|49\|50 |

**Viability:** 87%, 4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C216
**Designation:** CC1-PI 19
**Species:** Human
**Tissue:** Cervix
**Morphology:** Epithelial-like
**Description:** This cell line was isolated from an Iranian patient with adenocarcinoma of the cervix in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:3, ie seeding at 3-6 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 5
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **2** | **1** | **3** | **4** | **4** | **2** | **1** | **4** | **1** | **1** | **2** | **1** | **1** |
| **61** | **65** | **67** | **68** | **69** | **70** | **71** | **72** | **73** | **74** | **75** | **76** | **78** | **79** | **81** | **82** |

**Viability:** 96%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C217
**Designation:** HL-60
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** HL-60 cell line was derived from peripheral blood lymphocytes obtained by leukopheresis from a 36-year-old Caucasian female with acute promyclocytic leukemia. Up to 10% of cultured cells spontaneously differentiate beyond the promyclocytic stages and this proportion is enhanced by polar-planar compounds eg DMSO. A variety of other compound, including butyrate, hypoxathine,TPA, actinomycine D, retinoic acid also induce differentiation. HL-60 cells lack specific markers for lymphoid cells but express surface receptors for Fc fragment and complement. They exhibit phagocytic activity and responsiveness to chemotactic stimuli. HL-60 cells form colonies in semi-solid media and produce subutaneous myeloid tumors in nude mice.
**Culture Medium:** RPMI 1640 + 10-20% FBS.
**Preservation Medium:** FBS + 10% DMSO

**Subculture Routine:** Maintain cultures at 1-5 x 10^5 cells/ml, 5% CO2, 37`C. Cells may differentiate at low density. After 6 weeks in culture cells may differentiate and should be replaced.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | 22,24 | 7,8 | 8,11 | 16 | 16 | 12 | 11,12 | 12,13 | 8,11 | 11 | 14,15 | 30 | X |

**ECACC Number:** 85011431
**Reference:** Blood 1979, 54:713; Nature 1977, 270:347.
**Karyology:** 2n=46, pseudodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 4 \| 4 \|20 |
|---|
| 43\|44\|45\|46 |

**Viability:** 98%, 2.2 x 10^6 cell/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C219
**Designation:** LCL PI 6
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 11-year-old male affected with X-Linked Agammaglobulinemia.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml **Sterility:** Tests for bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \|27\| 1 |
|---|
| 45\|46\|47 |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C244
**Designation:** LCL-PI 33
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian adult male.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO.
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 23,24 | 6,9 | 8 | 18 | 14,16 | 11,12 | 8,10 | 14,15 | 11,12 | 11,12 | 13,16 | 29,31 | X,Y |

**Viability:** 94%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C246
**Designation:** LCL PI 35
**Species:** Human

**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian adult.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **1 \|29** |
|---|
| **45\|46** |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C249
**Designation:** LCL-PI 65
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian female.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 20,23 | 7,9 | 8,11 | 17,18 | 15,17 | 11,12 | 10,11 | 12,14 | 10,13 | 11,12 | 12,17 | 30,33 | X |

**Viability:** 92%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C269
**Designation:** LCL-PI 58
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian male.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 22,24 | 6,9 | 11 | 16,18 | 15,16 | 11,13 | 9 | 13,15 | 8,12 | 12 | 13 | 31 | X,Y |

**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C289
**Designation:** LCL-PI 78
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral

blood lymphocytes of a healthly Iranian female.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 20,25 | 6 | 8 | 15,19 | 15,16 | 11 | 8,12 | 10,14 | 9,12 | 10,11 | 14 | 27,30 | X,Y |

**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|29 |
|---|
| 45\|46 |

**Viability:** 99%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C312
**Designation:** LCL-PI 101
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian male.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 22,24 | 6,9 | 11 | 15,16 | 16,18 | 13 | 8,11 | 11,15 | 11,12 | 8,11 | 15,16 | 29,33 | X,Y |

**Viability:** 98%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C315
**Designation:** LCL-PI 104
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian adult.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 19,24 | 9,10 | 8 | 15,16 | 15,16 | 11,12 | 12,13 | 13,15 | 9,12 | 12 | 15,19 | 28,31 | X,Y |

**Viability:** 98%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C328
**Designation:** LCL-PI 117
**Species:** Human

**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian female.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml. **Sterility:** Tests for bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 26 | 6,10 | 11 | 17,18 | 16 | 12,13 | 11,12 | 13,15 | 11,12 | 11 | 13,15 | 27,31 | X |

**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C340
**Designation:** LCL-PI 129
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian female.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 21,22 | 6 | 8 | 13,19 | 15,18 | 10 | 12,13 | 13,14 | 9,11 | 8,10 | 15,16 | 30,31 | X |

**Viability:** 70%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C344
**Designation:** LCL-PI 133
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian adult male.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11,13 | 21,25 | 6,10 | 8,12 | 16,19 | 15,18 | 11,13 | 8,10 | 11,13 | 9,10 | 9,11 | 12 | 28,32 | X,Y |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C357
**Designation:** LCL-PI 146
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral

blood lymphocytes of a healthly Iranian male.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml
**Sterility:** Tests for bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 20 | 9,10 | 8,11 | 14,18 | 16,17 | 11,12 | 10,12 | 15 | 8,10 | 8,12 | 14,16 | 30,31 | X,Y |

**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C373
**Designation:** LCL-PI 162
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian female.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml. split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22,25 | 9,10 | 8 | 16,17 | 15,17 | 11,12 | 10,13 | 11,15 | 11 | 11,12 | 14,16 | 27,32 | X |

**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide

sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C381
**Designation:** LCL-PI 170
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian female.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 21 | 6,7 | 10,12 | 16,17 | 16,19 | 12 | 9,10 | 10 | 12 | 11,12 | 11,13 | 28,29 | X |

**Viability:** 98%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C382
**Designation:** LCL-PI 171
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian female.
**Culture Medium:** RPMI 1640 + 10% FBS.

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9,10 | 22 | 7,9 | 8,11 | 16,17 | 17 | 11,12 | 10 | 10 | 11,13 | 11,12 | 15,21 | 29,30 | X |

**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C390
**Designation:** LCL-PI 179
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian female.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 18,24 | 7,8 | 8 | 14,18 | 15,17 | 11,13 | 11,13 | 12,14 | 11 | 9,11 | 13,18 | 31 | X |

**Viability:** 98%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C395
**Designation:** LCL-PI 184
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthly Iranian female.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 21,24 | 6 | 8 | 18,19 | 15,16 | 11,12 | 8 | 13,14 | 12 | 10,12 | 12,15 | 26,27 | X |

**Viability:** 98%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C422
**Designation:** P19
**Species:** Mouse
**Tissue:** Embryo
**Morphology:** Epithelial-like.
**Description:** P19 cell line is a teratocarcinoma cell line derived from an embryonal carcinoma induced in a C3H/He strain mouse. In contrast to many of the embryonal carcinoma cell lines P19 can be cloned at high efficiency in medium containing 10^-4 M beta-mercaptoethanol. These pluripotent cells, which differentiate poorly under normal culture conditions, can be induced to differentiate into neuronal and glial cells in the presence of retinoic acid. In the presence of DMSO aggregates of P19 cells differentiate rapidly to form large amounts of

cardiac and skeletal muscle but no neurons or glia. Cultures exposed to both retinoic acid (5 x 10^-7 M) and DMSO (0.5 or 1.0%) developed as if exposed only to retinoic acid.
**Culture Medium:** Alpha MEM + 2.5% FBS + 7.5% CS.

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split sub-confluent cultures (70-80%) 1:3 to 1:6 i.e. seeding at 2-4x10,000 cells/cm² using 0.25% trypsin or trypsin/EDTA; 5% CO2; 37°C
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1825
**ECACC Number:** 95102107
**Reference:** Dev Biol 1982, 89:503; J Cell Biol 1982, 94:253; Nature 1982, 299:165.
**Karyology:** 2n=40, aneuploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **1** | **5** | **11** | **6** | **2** | **1** | **1** | **1** |
| **37** | **38** | **39** | **40** | **41** | **47** | **52** | **56** | **64** |

**Viability:** 99%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C425
**Designation:** Sf 9
**Species:** Fall army worm (Spodoptera frugiperda)
**Tissue:** Ovary
**Morphology:** Spherical
**Description:** The Sf9 cell line was derived from pupal ovarian tissue of Spodoptera frugiperda. The cells are highly susceptible to infection with Autographa californica MNPV and other Baculoviruses and are used in the production of protein products genetically manipulated into Baculovirus vector systems.
**Culture Medium:** TC 100 + 10 % FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures between 3 x 10^5 to 1 x 10^6 cells/ml, 27`C. Gently resuspend cells in old culture medium by dislodging the cells by pipetting or gentle agitation and resuspend in fresh medium. Cells should stick to the culture flask.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 29
**ATCC Number:** CRL-1711

**ECACC Number:** 89070101
**Reference:** In Vitro 1977, 13:213; Proc Nat Acad Sci, USA 1985, 82:8404.
**Viability:** 98%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C426
**Designation:** MDCK
**Species:** Canine (Canis familiaris)
**Tissue:** Kidney
**Morphology:** Epithelial-like
**Description:** The MDCK cell line was derived from a kidney of an apparently normal adult female cocker spaniel. The MDCK line at various passage levels, has been used in numerous viral studies and supports the growth of a wide range of animal viruses like Vesicular Slomatitis Virus(Indiana strain ), infectious canine hepatits, vaccinia, Coxsackie B-5, adeno virus types 4, 5 and reovirus types 2, 3 and Swine vesicular examthema Virus. the cell line is not susceptible to poliovirus type 2 and Coxsackie B-3 and B-4.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using trypsin/EDTA, 5% CO2, 37`C. Cells attach firmly and require at least 2 PBS washes prior to addition of trypsin/EDTA.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-34
**ECACC Number:** 84121903
**Reference:** Proc Soc Exp Biol Med 1958, 98:574; ibid 1966, 122;931.
**Karyology:** 2n=78, pseudodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **3** | **15** | **1** | **2** | **3** | **1** | **1** | **1** |
| **66** | **70** | **71** | **74** | **78** | **79** | **80** | **81** | **82** | **84** | **88** |

**Viability:** 98%, 1.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C427
**Designation:** PC-3
**Species:** Human
**Tissue:** Prostate
**Morphology:** epithelial
**Description:** The PC-3 cell line was initiated from a grade IV prostatic adenocarcinoma from a 62-year-old Caucasian male. The cells grow in soft agar and produce tumors in nude mice. The cells exhibit a low acid phosphatase and testosterone -5-alpha reductase activity and can be readily adapted to growth in suspension culture system.
**Culture Medium:** Ham's F12 or F12 K medium + 1% AA + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:6, ie seeding at 2-5 x 10^4 cells/cm^2 using a mixture of 0.01% collagenase, 0.02% trypsin and 1% chick serum at room temprature, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 57
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 24 | 6,7 | 8,9 | 17 | 16 | 13 | 8 | 13 | 11 | 11 | 13,14 | 29,31 | X |

**ATCC Number:** CRL-1435
**ECACC Number:** 90112714
**Reference:** Invest Urology 1979, 17:16; Cancer Res 1980, 40:524.
**Karyology:** 2n=46, near triploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 2 \| 1 \| 2 \|13\| 4 \| 2 \| 3 |
|---|
| 56\|58\|59\|60\|61\|62\|63\|64\|65 |

**Viability:** 94%, 2.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C428
**Designation:** Du-145
**Species:** Human
**Tissue:** Prostate
**Morphology:** Epithelial-like
**Description:** This cell line was isolated from a lesion in the brain of a 69-year-old Caucasian male patient with widespread metastatic carcinoma of the prostate and a 3-year history of lymphocytic leukemia. The line was not detectably hormone-sensitive, was only weakly positive for acid phosphatase and isolated cells would form colonies in soft agar. Ultrastructural analyses of both the cell line and the original tumor revealed microvilli, tonofilaments and desmosomes, large number of mitochondria, well-developed golgi and heterogeneous lysosomes.
**Culture Medium:** EMEM + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C .
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 61
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 22 | 7 | 11 | 16,17, 18 | 16 | 10,13 | 7,10,11 | 13,14 | 12,14 | 11,13 | 12 | 29,30 | X,Y |

**ATCC Number:** HTB-81
**Reference:** Cancer Res 1977, 37:4049; Int J Cancer 1978, 21:247.
**Karyology:** 2n=46, hypotriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 2 \| 1 \| 2 \| 2 \| 3 \| 2 \| 5 \| 4 \| 4 \| 2 \| 1 |
|---|
| 47\|48\|50\|51\|54\|55\|56\|57\|58\|59\|60\|61\|85 |

**Viability:** 99%, 1.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C429
**Designation:** EJ138
**Species:** Human
**Tissue:** Bladder
**Morphology:** Epithelial-like
**Description:** Isoenzyme analysis and HLA profiles have shown that EJ138 is in fact T24. Sometimes referred to as MGH-U1.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3, ie seeding at 4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 22 | 6 | 8,11 | 17 | 16 | 10,12 | 11,12 | 14 | 12 | 9 | 16,18 | 29 | X |

**ECACC Number:** 85061108
**Reference:** Nature 1983, 301:429.
**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 2 \| 1 \| 2 \| 1 \| 1 \| 3 \| 2 \| 4 \| 1 \| 2 \| 1 \| 1 \| 1 \| 2 \| 1 \| 1 \| 1 |
|---|
| 48\|52\|74\|75\|76\|77\|78\|82\|83\|84\|85\|86\|87\|88\|89\|90\|92\|93\|96 |

**Viability:** 98%, 3.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C430
**Designation:** OVCAR-3
**Species:** Human
**Tissue:** Ovary

**Morphology:** Epithelial-like
**Description:** This cell line was established from the malignant ascites of a patient with progressive adenocarcinoma of the ovary. The cell line is tumorigenic in nude athymic mice and forms colonies in soft agar. The line is resistant in vitro to clinically relevant concentrations of adriamycin, melphalan and cisplatin. Both cultured cells and xenografts exhibit androgen and estrogen receptors. This cell line is an appropriate model system in which to study drug resistance in ovarian cancer, and the presence of hormone receptors should be useful for the evaluation of hormonal therapy.
**Culture Medium:** RPMI 1640 + 10 microgram/ml insulin + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 21 | 9,10 | 8 | 17 | 17,18 | 11,12 | 10 | 10,15 | 12 | 12 | 13 | 29,31 | X |

**ATCC Number:** HTB-161
**Reference:** Cancer Res 1983, 43: 5379; Science 1984, 224:994; Cancer Res 1984, 44:5427; Cancer Res 1984, 44:5286; Semin Oncol 1984, 11:285; Clin Endocrinol Metab 1984, 59:561.
**Karyology:** 2n=46, near triploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 2 \| 2 \| 3 \| 3 \| 7 \| 4 \| 2 \| 3 |
|---|
| 52\|55\|59\|61\|62\|63\|64\|65\|66\|67\|68\|69 |

**Viability:** 97%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C431
**Designation:** Calu-6
**Species:** Human
**Tissue:** Lung
**Morphology:** Epithelial-like
**Description:** This cell line was derived from a 61-year-old Caucasian female with anaplastic

carcinoma of the lung.
**Culture Medium:** Eagle's MEM with NEAA + Sodium pyruvate + 1mM Earle's BSS + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 32
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22 | 9 | 8 | 17 | 16 | 12 | 10 | 11,15 | 11 | 12 | 14,17 | 31 | X |

**ATCC Number:** HTB-56
**Reference:** J Nat Cancer Inst 1977, 58:209; ibid 1977, 59:221; Nat Cancer Inst Monogr 1978, 49:5.
**Karyology:** 2n=46, hypotriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 2 \| 3 \|14\| 8 \| 1 |
|---|
| 52\|53\|54\|55\|56\|57 |

**Viability:** 99%, 2.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C432
**Designation:** MDA-MB-175-VII
**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial-like
**Description:** This cell line was derived from pleural effusion of a 56-year-old Negro female with breast ductal carcinoma. The cell line is semi-suspension.
**Culture Medium:** Leibovitz's L-15 medium + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI. The L-15 medium formulation was devised for use in a free gas exchange with atmospheric air. A CO2 and air mixture is detrimental to cells when using this medium for cultivation.

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 45
**ATCC Number:** HTB-25
**Reference:** J Nat Cancer Inst 1974, 53:661.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2** | **1** | **1** | **2** | **2** | **3** | **1** | **2** | **1** | **2** | **4** | **2** | **2** | **1** | **1** | **1** | **1** | **1** |
| **71** | **73** | **77** | **78** | **79** | **80** | **81** | **82** | **83** | **84** | **85** | **86** | **87** | **88** | **89** | **90** | **91** | **95** |

**Viability:** 80%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C433
**Designation:** MDA-MB 361
**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial-like
**Description:** This cell line was isolated from a 40-year-old Caucasian female with breast carcinoma. The L-15 medium formulation was derived for use in a free gas exchange with atmospheric air. A CO2 and air mixture is detrimental to cells when using this medium for cultivation.
**Culture Medium:** Lebovitz's L-15 medium + 15% FBS. The cell line was adapted to RPMI + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 20,24 | 10 | 8,11 | 17 | 16 | 10,11 | 9,12 | 15 | 11 | 11,12 | 12,15 | 29,32 | X |

**ATCC Number:** HTB-27
**ECACC Number:** 92020423
**Reference:** Cancer Res. 1980;40:3118-3129, In Vitro 1976;12:331, Cancer Res 1970;39:919-922, J. Natl. Cancer Inst. 1974; 53:661-674, J. Natl. Cancer Inst. 1977; 58:209-214, In Vitro 1978; 14:911-915, Cancer Res. 1992;52:2460-2463, Cancer Res. 1994; 54:2615-2621.
**Karyology:** 2n=46, hyperdiploid
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 1 \| 1 \| 1 \| 2 \| 4 \| 9 \| 5 \| 5 |
|---|
| 48\|49\|51\|53\|54\|55\|56\|57\|58 |

**Viability:** 99%, 3.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C434
**Designation:** BT-20
**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial-like
**Description:** This breast tumor cell line was established by isolation and cultivation of cells spilling out of the tumor when it was cut in thin slices.
**Culture Medium:** Eagle's MEM with NEAA + Sodium pyruvate + EBSS + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^6 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** HTB-19
**Reference:** J Nat Cancer Inst 1958, 21:1131; Int J Cancer 1975, 16:74.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 5 \| 2 \|12\| 4 \| 2 \| 1 \| 1 \| 1 |
|---|
| 45\|46\|47\|48\|49\|50\|51\|52\|53 |

**Viability:** 98%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide

sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C435
**Designation:** BT-474
**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial-like
**Description:** The BT-474 cell line was isolated from a solid, invasive ductal carcinoma of the breast obtained from a 60-year-old Caucasian patient. The cells varied greatly in size and had large nuclei with one or more nucleoli. This cell line is reportedly tumorigenic in athymic nude mice and will form nodules in Amsterdam/IMR rats with regression in 10 days. This epithelial cell line was found to be susceptible to mouse mammary tumor virus (RIII- MuMTV) and can support its replication. The cells form compact, multilayered colonies and rarely become confluent.
**Culture Medium:** RPMI 1640 with 10 microgram/ml bovine insulin and 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 3-5 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** HTB-20
**ECACC Number:** DSMZ no.: ACC 64
**Reference:** J Nat Cancer Inst 1978, 61:967; In Vitro 1979, 15:723.
**Karyology:** 2n=46, Aneuploid mostly hypertetraploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **1 \| 1 \| 2 \| 1 \| 1 \| 2 \| 2 \| 1 \| 2 \| 2 \| 7 \| 3 \| 4 \| '1'** |
|---|
| **53\|63\|80\|84\|85\|86\|88\|89\|92\|93\|96\|97\|98\|104** |

**Viability:** 96%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C436
**Designation:** TE671/RD
**Species:** Human
**Tissue:** Muscle
**Morphology:** Epithelial-like
**Description:** The cells possess functional nicotinic acetylcholine receptors and receptors for acetylcholine and peripheral type bezodiazepine receptors. No choline acetyl transferase or tyrosine hydroxylase activities are detectable. This is a subline of the TE671 cell line developed in 1977.
**Culture Medium:** DMEM + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 20,21 | 10 | 9 | 18 | 15,17 | 10,11 | 8,13 | 11,15 | 13 | 10,11 | 13 | 27,28 | X |

**ATCC Number:** CRL-8805
**ECACC Number:** 94052610
**Reference:** Int J Cancer 1977, 20:206; Brain Res 1982, 231:365; Nature 1989, 337:311; ibid 1989, 340:106.
**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 2 \| 2 \| 1 \| 3 \| 1 \| 4 \| 4 \| 1 \| 4 \| 3 \| 3 |
|---|
| 75\|77\|78\|79\|80\|81\|84\|85\|86\|87\|88\|90\|92 |

**Viability:** 98%, 2.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C437
**Designation:** HT 1080
**Species:** Human
**Tissue:** Muscle

**Morphology:** Epithelial-like
**Description:** The HT 1080 cell line was established from a fibrosarcoma arising adjacent to the acetabulum of a 35-year-old Caucasian male. The cells were cultured on minimum essential medium (Eagle) with non-essential amino acids in Earle's BSS supplemented with 10% inactivated fetal bovine serum and antibiotics. Subcultivation was carried out in such a way so as to eliminate the growth of fibroblasts and favor the proliferation of epithelial cells. Once established the epithelial-like cells proliferated rapidly with loss of contact inhibition, exhibited a doubling time of 26 hours, and reached saturation densities of 1-2 x 10^6 cells/cm^2. Tumors developed in all subcutaneously inoculated NIH Swiss mice immunosuppressed with anti-thymocytic serum (ATS) within 7 days and the developing fibrosacomas could be serially propagated in ATS-treated mice. The cells were also found to be susceptible to RNA tumor viruses, RD 114 and FelV.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:4 to 1:8, ie seeding at 1-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 19
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22,25 | 6 | 8 | 14,19 | 16 | 11,13 | 9,10 | 13,14 | 12,14 | 9,12 | 12,18 | 28,30 | X,Y |

**ATCC Number:** CCL-121
**ECACC Number:** 85111505
**Reference:** Cancer 1974, 33:1027.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|25\| 4 |
|---|
| 45\|46\|47 |

**Viability:** 98%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C438
**Designation:** Detroit 532
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** This cell line has an apparent finite life span of approximately 30 serial subcultures from the tissue of origin with a subculture interval of approximately 4 days and a cultivation ratio of 1 to 3-5. It was derived from foreskin tissue of a 2-month-old Caucasian infant with Down's syndrome. The primary cultures were established from 1 mm fragments of minced tissues which were allowed to attach to the bottom of petri dishes after placement in small volumes of MEM (Eagle) with non-essential amino acids and Earle's BSS and 10% FBS supplemented with 0.1% lactalbumin hydrolysate and 1mM Sodium pyruvate. The primary explants were incubated at 37`C with 5% CO2, with frequent changes of medium until fibroblast-like outgrowths had formed dense cellular network covering the growth areas (30 days). Susceptibility to virus strains includes picornaviruses (Poliovirus types 1,2,3; echovirus types 9,11; Coxsackie virus type A9 and certain rhinoviruses); adenovirus types 3,7; parainfluenza virus type 3, vaccinia virus and herpes simplex virus.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 1mM Sodium pyruvate + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C. Finite lifespan, up to 30 passages expected.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 36
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 20,24 | 7,9 | 8 | 16,18 | 17,18 | 9,12 | 8 | 12 | 11,13 | 10,13 | 12,13 | 30,31 | X,Y |

**ATCC Number:** CCL-54
**ECACC Number:** 87032602
**Reference:** Experimental Cell Research-Volume 54, Issue 2, February 1969, Pages 187-194.
**Viability:** 90%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C439
**Designation:** LNCap-FGC-10
**Species:** Human
**Tissue:** Prostate
**Morphology:** Lymphoblast-like
**Description:** This cell line was isolated from a needle aspiration biopsy of the left supraclavicular lymph node of 50-year-old Caucasian male with confirmed diagnosis of metastatic prostate carcinoma. This cell is the only known human line available that has been proven to be androgen-sensitive and is important for cancer studies. The cells produce human prostatic acid phosphatase and prostate specific antigen and have androgen receptors.
**Culture Medium:** DMEM + 5% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | 24 | 7 | 11 | 16 | 14,16 | 12 | 8,9 | 13 | 12 | 8,12 | 13 | 30,37 | X |

**ATCC Number:** CRL-10995
**Reference:** Cancer Res 1983, 43:1809.
**Karyology:** 2n=46, hypertriploid (near tetraploid) cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **2** | **3** | **2** | **1** | **5** | **1** | **2** | **1** | **2** | **1** | **1** | |
| **53** | **54** | **58** | **63** | **72** | **74** | **77** | **82** | **83** | **84** | **85** | **86** | **87** | **88** | **89** | **90** | **92** | **93** | **94** | |

**Viability:** 94%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C440
**Designation:** MF1-PI 30
**Species:** Mouse
**Tissue:** Embryo
**Morphology:** Fibroblast-like

**Description:** This cell line was derived from 20-day-old whole embryo of BALB/c mouse in NCBI.
**Culture Medium:** RPMI 1640 +10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Reference:** Cancer Research July 1981, 41: 2891-2899.
**Karyology:** 2n=40

**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **2 \| 3 \|12\| 1 \| 1 \| 1** |
|---|
| **38\|39\|40\|70\|78\|80** |

**Viability:** 99%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C441
**Designation:** MSPF-PI 31
**Species:** Mouse
**Tissue:** Spleen
**Morphology:** Fibroblast-like
**Description:** The MSPF-PI 31 cell line was isolated from a BALB/c mouse in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=40

**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **3 \|18\| 5 \| 4** |
|---|
| **39\|40\|41\|42** |

**Viability:** 98%, 1.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C442
**Designation:** OVC1-PI 32
**Species:** Human
**Tissue:** Ovary
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a patient with ovary adenocarcinoma in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **3** | **4** | **1** | **5** | **3** | **3** | **2** | **3** | **2** | **2** | **1** |
| **44** | **46** | **48** | **51** | **58** | **62** | **66** | **73** | **79** | **84** | **87** | **91** |

**Viability:** 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C443
**Designation:** Thr.C1-PI 33
**Species:** Human
**Tissue:** Thyroid
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from thyroid cancer of a 55-year-old Iranian female in NCBI.

**Culture Medium:** RPMI 1640 +10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9,11 | 24 | 6,9 | 8,10 | 16,18 | 16 | 9,12 | 8,11 | 13 | 11 | 11 | 13 | 27,30 | X |

**Karyology:** 2n=46, hypotriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 3 \| 1 \| 1 \| 5 \| 3 \|14\| 1 \| 1 \| 1 |
|---|
| 50\|51\|52\|54\|55\|56\|59\|60\|71 |

**Viability:** 99%, 2.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C445
**Designation:** E8 (AGO1522)
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** E8 AGO1522 cell line was derived from skin of a 3-day-old newborn male and it is resistant to radiation.
**Culture Medium:** EMEM (EBSS) + 20% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:4, ie seeding at 2-5 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 10
**DNA Typing:**

| CSF1P | FG | TH0 | TPO | VW | D3S13 | D5S8 | D7S8 | D8S11 | D13S3 | D16S5 | D18S | D21S | AME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| O: | A: | 1: | X: | A: | 58: | 18: | 20: | 79: | 17: | 39: | 51: | 11: | L: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 20,21 | 9 | 8 | 17 | 16 | 11 | 11 | 11,15 | 11 | 12 | 12,16 | 29 | X |

**Reference:** Mutal Res 1980 70:241, Cancer Res 1980 40:920, Biochim Biophys Acta 1980 607 :432.
**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 3 \| 2 \| 3 \| 7 \| 1 \| 3 \| 2 \| 1 \| 1 \| '1' |
|---|
| 78\|80\|81\|82\|83\|84\|89\|90\|92\|93\|94\|95\|97\|97\|101 |

**Viability:** 98%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C446
**Designation:** 2008/C13.R
**Species:** Human
**Tissue:** Ovary
**Morphology:** Epithelial-like
**Description:** This cell line was derived from 2008, a cell line established from a patient with serous cystadenocarcinoma of the ovary. Selection consisted of 13 treatments with 1 micro M cisplatin, 1 month apart followed by chronic exposure which increased from o.25 to 3 micro M. Cells are maintained as monolayers. They have not been successfully grown as spheriods.
**Culture Medium:** DMEM + 7.5% FBS + 7.5% newborn calf serum. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 23 | 8,9 | 8,11 | 15,16 | 15 | 12 | 8 | 14 | 10,11 | 11 | 12 | 3,31 | X |

**Reference:** Chem-Bio Interactions 1988, 65:51.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 5 \| 3 \| 5 \| 3 \| 4 \| 2 \| 1 \| 1 \| 1 \| 1 |
|---|
| 46\|47\|52\|53\|54\|55\|56\|57\|58\|59\|60\|65\|83\|97 |

**Viability:** 99%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C449
**Designation:** AGO 1522
**Species:** Human
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** This cell line was initiated from explants of minced foreskin removed ante-mortem from a 3-day-old Caucasian male.
**Culture Medium:** EMEM (EBSS) + 20% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 6
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 20,25 | 9 | 8 | 16,18 | 15,16 | 10 | 15 | 12,14 | 9,10 | 10 | 12 | 29,30 | X |

**Reference:** Mutat Res 1980, 70:241; Cancer Res 1980, 40:920; Biochem Biophys Acta 1980, 607:432.
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 2 \| 5 \| 3 \| 4 \| 2 \| 8 \| 3 \| 1 |
|---|

| 54\|58\|59\|60\|61\|62\|63\|64\|65\|66 |
|---|

**Viability:** 97%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C450
**Designation:** 5637
**Species:** Human
**Tissue:** Bladder
**Morphology:** Epithelial-like
**Description:** This cell line was developed from a primary tumor of bladder obtained from a 68-year-old Caucasian male.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin /EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22 | 7,9 | 8,9 | 18 | 15,17 | 11,12 | 10,11 | 10,16 | 11 | 9 | 16,18 | 36 | X,Y |

**ATCC Number:** HTB-9
**ECACC Number:** DSMZ no.: ACC 35
**Reference:** Leuk Res. Volume 21, Issue 4, April 1997, Pages 343-350.
**Karyology:** 2n=46, hypotriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 5 \| 7 \| 3 \| 3 \| 3 \| 6 \| 1 |
|---|
| 42\|49\|58\|60\|61\|62\|63\|64\|66 |

**Viability:** 99%, 5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C451
**Designation:** AKATA
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** Activation of latent EBV via anti-IgG-triggered, second messenger pathways in the Burkitt's lymphoma cell line Akata
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Virus Genes Volume 5, Number 2 / June, 1991.
**Karyology:** 2n=46, diploid-hypodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | |
|---|---|---|---|---|---|
| **1** | **1** | **7** | **6** | **13** | **2** |
| **40** | **42** | **43** | **44** | **46** | **62** |

**Viability:** 99%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C452
**Designation:** HFF-PI 34
**Species:** Human
**Tissue:** Embryo
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 6-week-old male human embryo in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C..
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4

**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|28\| 1 |
|---|
| 45\|46\|47 |

**Viability:** 99%, 1.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C453
**Designation:** Saos-2
**Species:** Human
**Tissue:** Bone
**Morphology:** Epithelial-like
**Description:** Saos-2 cell line was derived from an osteogenic sarcoma obtained from an 11-year-old Caucasian female.
**Culture Medium:** McCoy's 5a + 10% FBS. The cell line was adapted to RPMI1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 2-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 30
**ATCC Number:** HTB-85
**ECACC Number:** 89050205
**Reference:** J Nat Cancer Inst 1977, 58:209; ibid 1977, 59:221.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 1 \| 1 \| 6 \| 6 \| 1 \| 8 \| 1 \| 2 \| 1 |
|---|
| 50\|53\|54\|55\|56\|58\|59\|60\|61\|62\|63 |

**Viability:** 98%, 1.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C454
**Designation:** A 2780 CP
**Species:** Human
**Tissue:** Ovary
**Morphology:** Epithelial-like
**Description:** This cell line was established from A 2780 S cells by either intermittent (100 micro M) or continuous (40 micro M) exposure to cisplatin. (Cisplatin resistant cell line).
**Culture Medium:** DMEM + 5% FBS + 5% newborn calf serum. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 19,24 | 6 | 8,10 | 15,16 | 14,16 | 11,12 | 9,10 | 15,17 | 13 | 11,13 | 16,18 | 27,28 | X |

**Reference:** NCI Monographs 1988, 6:159.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|29 |
|---|
| 45\|46 |

**Viability:** 98%, 3.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C455
**Designation:** U-373 MG

**Species:** Human
**Tissue:** Brain
**Morphology:** Epithelial-like
**Description:** This cell line was derived from a malignant tumor of a 61-year-old Caucasian male by explant technique.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 1mM Sodium pyruvate + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37ºC.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 183
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22,26 | 10 | 8 | 16,18 | 16 | 11,12 | 10,12 | 13,15 | 10,11 | 12 | 14 | 29,30 | X |

**ATCC Number:** HTB-17
**ECACC Number:** 89081403
**Reference:** Acta Path Microbiol Scan 1968, 74:465; Hum Hered 1971, 21:238.
**Karyology:** 2n=46, hyperdiploid-hypotriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 4 \| 4 \| 1 \| 1 \| 6 \| 1 \| 6 \| 3 \| 1 |
|---|
| 40\|52\|53\|54\|57\|58\|59\|60\|61\|62\|63\|64 |

**Viability:** 99%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C456
**Designation:** Mel-III
**Species:** Rhesus
**Tissue:** Mammary gland
**Description:** Rhesus mammary gland carcinoma
**Culture Medium:** DMEM + 10% FBS

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37ºC..
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negaive.
**Reference:** Journal of Immunological Methods 203 1997, 103–109.
**Karyology:** 2n=60
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 3 \| 6 \| 4 \| 3 \| 6 \| 3 \| 2 \| 1 \| 1 |
|---|
| 52\|54\|55\|56\|57\|58\|59\|60\|62\|65 |

**Viability:** 95%, 2.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C458
**Designation:** SK-Mel-3
**Species:** Human
**Tissue:** Lymph node
**Morphology:** fibroblast-like
**Description:** This cell line was isolated from tumor cells of a 42-year-old Caucasian female. The cells were released by trypsinization of the lymph node metastases. McCoy's 5a medium + 10% FBS was used with primary cultures and replaced with MEM later.
**Culture Medium:** McCoy's 5a + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Volumes used in this protocol are for 75 cm2 flask; proportionally reduce or increase amount of dissociation medium for culture vessels of other sizes. 1. Remove and discard culture medium.2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin-0.53mM EDTA solution to remove all traces of serum, which contains trypsin inhibitor.3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. 5. Add appropriate aliquots of the cell suspension to new culture vessels. Subcultivation Ratio: 1:3 to 1:5. Incubate cultures at 37°C.
**Isoenzymes:** LDH,G6PD,NP

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** HTB-69
**ECACC Number:** DSMZ no.: ACC 321.
**Reference:** 21869: . Human tumor cells in vitro. New York: Plenum Press; 1975. 22536: Fogh J, et al. Absence of HeLa cell contamination in 169 cell lines derived from human tumors. J. Natl. Cancer Inst. 58: 209-214, 1977. PubMed: 833871.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **2** | **1** | **2** | **6** | **3** | **1** | **1** | **1** | **2** | **2** | **1** | **1** | **'1'** | **'1'** | **'1'** | **'1'** |
| **54** | **56** | **57** | **58** | **60** | **61** | **62** | **63** | **65** | **67** | **69** | **70** | **71** | **72** | **94** | **116** | **118** | **119** | **122** |

**Viability:** 99%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C459
**Designation:** MIA Paca-2
**Species:** Human
**Tissue:** Pancreas
**Morphology:** Epithelial-like
**Description:** This cell line was established from tumor tissue of the pancreas obtained from a 65-year-old Caucasian male. The established cell line reportedly has a doubling time of about 40 hours and a colony-forming efficiency in soft agar of approximately 19%. The cells are sensitive to asparaginase.
**Culture Medium:** DMEM + 10% FBS + 2.5% horse serum. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 125
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 22 | 9,10 | 9 | 15 | 16 | 13 | 12,13 | 16 | 12,13 | 11,13 | 12 | 29,31 | X |

**ATCC Number:** CRL-1420
**ECACC Number:** 85062806
**Reference:** Int J Cancer 1977, 19:128.
**Karyology:** 2n=46, hypotriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 3 \| 8 \| 6 \| 7 \| 1 \| 2 |
|---|
| 54\|62\|63\|64\|65\|66\|67\|68 |

**Viability:** 97%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C460
**Designation:** SFLF-PI 35
**Species:** Sheep
**Tissue:** Liver
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 2-month-old male sheep fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=54, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \|28 |
|---|
| 49\|53\|54 |

**Viability:** 98%, 1.6 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C461
**Designation:** A 2780 S
**Species:** Human
**Tissue:** Ovary
**Morphology:** Epithelial-like
**Description:** This cell line was established from an untreated ovarian cancer. The cells are sensitive to cisplatin. The cells are maintained as monolayers in drug free DMEM because of the availability of pi free DMEM for NMR experiments. The doubling time for these cells grown in DMEM /F12 + 7.5% FBS + 7.5% newborn calf serum is the same as those grown in DMEM. These cells have been successfully grown as spheroids.
**Culture Medium:** DMEM + 5% FBS + 5% newborn calf serum. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** NCI Monographs 1988, 6:159.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **2** | **28** |
| **44** | **46** |

**Viability:** 99%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C462
**Designation:** SFLSF-PI 36
**Species:** Sheep
**Tissue:** Liver-Spleen
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 2-month-old male sheep fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C..

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=54, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|28\| 1 |
|---|
| 52\|54\|55 |

**Viability:** 98%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C464
**Designation:** SFKF-PI 37
**Species:** Sheep
**Tissue:** Kidney
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 2-month-old male sheep fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C..
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=54, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 29\| 1 |
|---|
| 54\|55 |

**Viability:** 99%, 1.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C465
**Designation:** SFAF-PI 38
**Species:** Sheep
**Tissue:** Abdomen
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 2-month-old male sheep fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C..
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=54, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **1** | **29** |
| **53** | **54** |

**Viability:** 99%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C466
**Designation:** HT29
**Species:** Human
**Tissue:** Colon
**Morphology:** Epithelial-like
**Description:** The HT-29 cell line was isolated from a primary tumor of a 44-year-old Caucasian female using the explant culture method and medium F12 with 15% FBS. The cells produce carcinoembryonic antigen (CEA) and form well-differentiated adenocarcinoma consistent with colonic primary, grade I. Tumors are also formed in steroid-treated hamsters.
**Culture Medium:** McCoy's 5a + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS +10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**Passage No:** 141
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 20,22 | 6,9 | 8,9 | 17,19 | 15,17 | 11,12 | 10 | 10 | 11,12 | 11,12 | 13 | 29,30 | X |

**ATCC Number:** HTB-38
**ECACC Number:** 91072201
**Reference:** Human Tumor Cells In Vitro 1975, Plenum Press, New York, pp.115.
**Karyology:** 2n=46, hypertriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 3 \| 2 \| 6 \| 9 \| 1 \| 5 \| 2 \| 1 \| 1 |
|---|
| 65\|66\|67\|68\|69\|70\|72\|75\|76 |

**Viability:** 89%, 1.6 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C467
**Designation:** SFBF-PI 39
**Species:** Sheep
**Tissue:** Brain
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 2-month-old male sheep fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Viability:** 95%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C468
**Designation:** SFTF-PI 40
**Species:** Sheep
**Tissue:** Tongue
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 2-month-old male sheep fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=54, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | |
|---|---|---|---|
| **3** | **24** | **1** | **1** |
| **52** | **54** | **56** | **58** |

**Viability:** 99%, 8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C469
**Designation:** SFBF-PI 41
**Species:** Sheep
**Tissue:** Bone
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 2-month-old male sheep fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**Passage No:** 4
**Karyology:** 2n=54, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|28\| 1 |
|---|
| 52\|54\|56 |

**Viability:** 98%, 1.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C470
**Designation:** SFTF-PI 42
**Species:** Sheep
**Tissue:** Tail
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 2-month-old male sheep fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin /EDTA, 5% CO2, 37`C..
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=54, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|28\| 1 |
|---|
| 53\|54\|56 |

**Viability:** 99%, 6.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C471
**Designation:** SFTF-PI 43
**Species:** Sheep
**Tissue:** Testis
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 2-month-old male sheep fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C..
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=54, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **29** | **1** |
| **54** | **55** |

**Viability:** 99%, 2.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C472
**Designation:** SFIF-PI 44
**Species:** Sheep
**Tissue:** Intestine
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 2-month-old male sheep fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C..
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=54, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | |
|---|---|---|
| **1** | **1** | **28** |
| **52** | **53** | **54** |

**Viability:** 99%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C473
**Designation:** SFSF-PI 45
**Species:** Sheep
**Tissue:** Skin
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from a 2-month-old male sheep fetus in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 4
**Karyology:** 2n=54, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | |
|---|---|---|
| **1** | **\|28\|** | **1** |
| **52** | **\|54\|** | **55** |

**Viability:** 99%, 2.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C478
**Designation:** HTHCL-PI 47
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an adult male patient with hairy cell leukemia.

**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 96%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C479
**Designation:** HHCL-PI 48
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was derived from peripheral blood of a Caucasian male patient with Hairy cell leukemia in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C..
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** +5
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **8** | **1** | **1** | **1** | **1** | **4** | **1** | **2** | **2** | **1** | **1** | **1** | **1** | **1** | **1** | **1** |
| **38** | **45** | **46** | **47** | **48** | **49** | **51** | **52** | **54** | **56** | **68** | **69** | **70** | **71** | **73** | **78** | **81** | **84** |

**Viability:** 90%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C480
**Designation:** SW 48
**Species:** Human

**Tissue:** Colon
**Morphology:** Epithelial-like
**Description:** SW 48 was isolated from the large ulcerating Grade IV tumor encircled the bowel of the 82-year-old Caucasian female patient. Little carcinoembryonic antigen (CEA) is produced and the cells are tumorigenic in nude mice.
**Culture Medium:** Leibovitz's L-15 medium + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI. The L-15 medium formulation was devised for use in a free gas exchange with atmospheric air. A CO2 and air mixture is detrimental to cells when using L-15 for cultivation.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin /EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-231
**ECACC Number:** 89012702
**Reference:** Cancer Res 1976, 36:4562; J Nat Cancer Inst 1977, 59:221.
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **1** | **1** | **2** | **9** | **10** | **2** | **4** | **1** |
| **44** | **45** | **46** | **47** | **48** | **49** | **50** | **68** |

**Viability:** 92%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C481
**Designation:** SW 1116
**Species:** Human
**Tissue:** Colon
**Morphology:** Epithelial-like
**Description:** SW 1116 was derived from a Grade II adenocarcinoma of the colon extending into the muscularis and marked melanosis was present. The donor patient was a 73-year-old Caucasian male of blood type O, Rh+. Colonies of the cultured cells show brush borders when examined by electron microscopy, and high levels of carcinoembryonic antigen (CEA) are produced. Cells are tumorigenic in nude mice.
**Culture Medium:** L-15 + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO

**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C. In case L-15 medium is used, cells should be cultured in a free gas exchange with atmospheric air. A CO2 and air mixture is detrimental to cells when using L-15 for cultivation.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 24 | 6,10 | 9,11 | 17,19 | 16 | 11 | 9 | 12 | 10,11 | 11 | 19 | 26,30 | X |

**ATCC Number:** CCL-233
**ECACC Number:** 87071006
**Reference:** Cancer Res 1976, 36:4562; J Nat Cancer Inst 1977, 59:221.
**Karyology:** 2n=46, hypotriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 2 \| 1 \| 9 \|10\| 3 \| 1 \| 1 |
|---|
| 55\|56\|57\|58\|59\|60\|61\|62\|63\|86 |

**Viability:** 98%, 2.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C482
**Designation:** M-NFS-60
**Species:** Mouse
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** The parental NFS-60 cell line, which requires IL-3 for growth and does not respond to macrophage colony stimulating factor (M-CSF), was established from an (NFS x DBA/2) F1 adult mouse myeloid leukemia induced by wild mouse ecotropic virus, Cas-Br-MuLV. The M-NFS-60 cell line was developed by selected growth in IL-3 (WEHI 3 conditioned medium) plus human recombinant M-CSF. The M-NFS-60 cells are dependent upon M-CSF for growth and fully respond to IL-3. The growth of the cells has been used as the basis of a simple assay for biological activity of human and mouse M-CSF.
**Culture Medium:** RPMI 1640 + 0.05 mM 2-mercaptoethanol + 2000 bone marrow colony forming U/ml (M-CSF) + 10% FBS.

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1838
**Reference:** Proc Nat Acad Sci, USA 1986, 83:5010; J Immunol 1990, 14:860.
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | |
|---|---|---|---|
| **27** | **1** | **1** | **1** |
| **40** | **42** | **81** | **82** |

**Viability:** 85%, 5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C483
**Designation:** J774 A.1
**Species:** BALB/c Mouse
**Tissue:** Hematopoietic
**Morphology:** Macrophage-like
**Description:** This cell line was adapted to culture from a tumor which arose in a female BALB/c mouse. Its growth is inhibited by dextran sulfate, PPD and LPS. This cell line will synthesize large amounts of lysozyme and exhibits minor cytolysis but predominantly antibody-dependent phagocytosis. IL-1 also known as lymphocyte-activiating factor (LAF), is synthesized continuously by this line. In addition, these cells have been shown to carry cell-bound receptors for immunoglobulin and complement.
**Culture Medium:** DMEM + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 3-9 x 10^5 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** TIB-67
**ECACC Number:** 91051511
**Reference:** J Immunol 1975, 114:898; Nature 1975, 257:393; J Exp Med 1976, 143:1528; Cancer Res 1977, 37:546; ibid 1977, 119:950.
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 1 \| 1 \| 1 \| 2 \| 2 \| 1 \| 3 \| 1 \| 3 \| 1 \| 9 \| 1 \| 1 |
|---|
| 46\|48\|50\|51\|52\|53\|58\|61\|62\|63\|64\|66\|68\|69\|71 |

**Viability:** 99%, 4.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C484
**Designation:** BS-C-1
**Species:** African green monkey
**Tissue:** Kidney
**Morphology:** Epithelial-like
**Description:** The BS-C-1 cell line was originated from primary cultures of Ceropithecus aethiops kidney cells. The medium originally employed for cultivation of BS-C-1 consisted of Morgan, Morton, and Parker's medium 199 with 0.1% Difco yeastolate and 20% FBS. The BS-C-1 cell line is a continuous cell line which develops characteristic cytopathogenic effects (CPE) when infected with SV40 virus and it is a valuable tool for viral diagnostic studies. This cell line is a suitable host for transfection, especially for SV40 vectors.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 025% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 15
**ATCC Number:** CCL-26
**ECACC Number:** 85011422
**Reference:** J Immunol 1963, 91:416; Am J Public Health 1964, 54:1522.
**Karyology:** 2n=60, hyperdiploid (near triploid) cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 2 \| 1 \| 1 \| 3 \| 2 \| 2 \| 1 \| 1 \| '2' \| '2' |
|---|
| \|42\|49\|50\|55\|59\|60\|65\|72\|77\|80\|82\|88\|90\|94\|95\|97\|98\|99\|100\|105 |

**Viability:** 99%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C485
**Designation:** CDw 32
**Species:** Mouse
**Tissue:**Skin
**Morphology:** Fibroblast-like
**Description:** This is amouse L cell line transfected with human CDw32 gene. The transfected cells express CDw32 molecule on their surface membrane.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Immunol 1988, 141:1891; Immunology 1996, 87, 616-623.
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | |
|---|---|---|---|---|
| **3** | **2** | **19** | **5** | **1** |
| **43** | **44** | **45** | **46** | **47** |

**Viability:** 98%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C486
**Designation:** MA104
**Species:** African green monkey
**Tissue:** Kidney
**Morphology:** Epithelial-like
**Description:** This cell line was estabilshed from an African green monkey fetal kidney. The cells are highly susceptible to Simian rotavirus SA11.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.

**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 15
**ECACC Number:** 85102918
**Reference:** J Gen Virol 1979, 43:513; Arch Virol 1981, 70:33.
**Karyology:** 2n=60, hyperdiploid (near triploid) cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **1** | **1** | **1** | **1** | **'2'** | **'2'** | **'1'** | **'2'** | **'1'** | **'2'** | **'1'** | **'2'** |
| **47** | **62** | **68** | **73** | **82** | **84** | **85** | **86** | **88** | **89** | **91** | **93** | **94** | **95** | **97** | **98** | **100** | **101** | **102** | **103** | **104** | **105** | **107** | **109** |

**Viability:** 99%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C488
**Designation:** LCL CL-PI 50
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a 12-year-old Iranian female with Cutix Laxa.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **1** | **29** |
| **45** | **46** |

**Viability:** 99%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C489
**Designation:** HCL BMF-PI 51
**Species:** Human
**Tissue:** Bone marrow
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from bone marrow of a 12-year-old Iranian female patient with Cutix Laxa in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 5
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 20,24 | 9,10 | 9,11 | 16,18 | 15 | 11,13 | 8 | 13,15 | 11,12 | 9,12 | 13,16 | 27,32 | X |

**Viability:** 99%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C490
**Designation:** SPM4-0
**Species:** Human x Mouse
**Tissue:** Hematopoietic
**Morphology:** Lymphoid
**Description:** The SPM4-0 cell line was obtained from X-ray irradiated mouse PAI line (a non-secretor variant of the P3X63.Ag8 myeloma fused with human spleen cells). The hybridomas obtained were selected for azaguanine resistance. SPM4-0 is HAT sensitive and Ouabain resistant (5 x 10^-4 M) by virtue of its mouse background.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to

RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Br.J.Cancer(1990).62,595-598.
**Karyology:**
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **2** | **2** | **5** | **8** | **1** | **4** | **4** | **1** |
| **79** | **80** | **81** | **82** | **83** | **84** | **85** | **86** | **87** | **88** | **89** |

**Viability:** 97%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C491
**Designation:** HNCF-PI 52
**Species:** Human
**Tissue:** Cervix
**Morphology:** Fibroblast-like
**Description:** This cell line was derived from primary culture of cervix tissue obtained from a healthy female.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 5
**Viability:** 99%, 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C492
**Designation:** 183-E95
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** 183-E95 cell line is a tetraploid B-CLL (chronic lymphocytic leukemia) cell line derived from a patient who showed no signs of progressive disease and had not been treated by steroids or cytostatic drugs for six months before leukapheresis. 95%, 2.3 x 10^6 cells/vial Tests for mycoplasma, bacteria and fungi were negative.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C..
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 21,22 | 6,9 | 7,8 | 15,17 | 13,15 | 11,12 | 9,11 | 15,16 | 11,13 | 12 | 16,17 | 30,31 | X,Y |

**Reference:** Leukemia 1994, 8:476.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 3 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 4 \| 6 \| 5 \| 2 \| 4 |
|---|
| 75\|76\|77\|78\|79\|80\|81\|83\|84\|85\|86\|87\|88 |

**Viability:** 95%, 2.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

---

**NCBI Code:** C493
**Designation:** BL-41
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was established from the tumor tissue of an 8-year-old Caucasian boy with Burkitt's lymphoma.

**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-6 x 10^5 cells/ml, 5% CO2, 37'C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** +DSMZ+ACC 160
**Reference:** J Nat Cancer Inst 1987, 78:235.
**Karyology:** 2n=46, quasidiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | |
|---|---|---|---|---|---|
| **1** | **1** | **11** | **12** | **4** | **1** |
| **45** | **46** | **47** | **48** | **49** | **50** |

**Viability:** 92%, 1.9 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C494
**Designation:** EHEB
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was established from the peripheral blood of a 69-year-old woman with B-CLL (chronic lymphocytic leukemia). Cells are described to be EBV+, CD5+ and to express mRNA of bcl-2, bcl-3 and c-myc.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37'C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** +DSMZ+ACC 67
**Reference:** Leukemia Res 1990, 14:381.
**Viability:** 98%, 2.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C495
**Designation:** DG-75
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was established from the pleural effusion of a 10-year-old boy with refractory terminal Burkitt's lymphoma.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-6 x 10^5 cells/ml, 5% CO2, 37'C.
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 20,23 | 6,7 | 8,11 | 17,18 | 16,17 | 12 | 11,12 | 13,15 | 9,11 | 11 | 11,13 | 27,30 | X,Y |

**ATCC Number:** CRL-2625™
**ECACC Number:** +DSMZ+ACC 83
**Reference:** Int J Cancer 1977, 19.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 4 \|15\| 1 \| 2 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| '1' |
|---|
| 42\|45\|46\|47\|48\|50\|57\|58\|59\|84\|89\|104 |

**Viability:** 98%, 3.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C496
**Designation:** DFW
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Epithelial-like

**Description:** DFW is a depigmented melanoma subline obtained from DFB, another melanoma cell line, by limiting dilution.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:8, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | 24 | 7 | 11 | 16 | 16 | 13 | 8,9 | 13 | 12 | 9,12 | 12 | 29 | X |

**Reference:** J Immunol 1999, 163:1037; Br J Cancer 2002, 87:414.
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 3 \|21\| 2 \| 1 |
|---|
| 45\|46\|47\|48\|49\|51 |

**Viability:** 95%, 4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C497
**Designation:** HEK293 [293]
**Species:** Human
**Tissue:** Embryonic Kidney
**Morphology:** Epithelial-like
**Description:** This is a cell line derived from human embryo kidney. The cells are transformed with sheared human Ad5 DNA and are sensitive to human adenoviruses and adenovirus DNA. The cell line can be used to isolate transformation defective host-range mutants of Ad5 and for titrating human 21 adenoviruses.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% HS or 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:3, ie seeding at 3-5 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C. Cells may take up to 7 days to attach after resucitation and subculture.

**ATCC Number:** CRL-1573
**ECACC Number:** 85120602
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 36
**ATCC Number:** CRL-1573
**ECACC Number:** 85120602
**Reference:** J Gen Virol 1977, 36:59; Virology 1977, 77:319; Brain Res Mol Brain Res 1995, 34:303; J Neurochem 1996, 67:212, Eur J Biochem 1996, 236:953; J Biol Chem 1996, 271:10385, Biochem Biophys Res Commun 1996, 220:710; J Virol 1996, 70:559.
**Karyology:** 2n=46, neartriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **2** | **1** | **1** | **2** | **2** | **7** | **1** | **6** | **2** | **3** | **1** | **1** |
| **60** | **62** | **63** | **64** | **65** | **66** | **68** | **69** | **70** | **71** | **72** | **73** | **75** |

**Viability:** 80%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C498
**Designation:** 293T [HEK293T]
**Species:** Human
**Tissue:** Embryonic Kidney
**Morphology:** Epithelial-like
**Description:** The 293T cell line, originally referred as 293tsA1609neo, is a highly transfectable derivative of human embryonic kidney 293 cells, and contains the SV40 T-antigen. This cell line is competent to replicate vectors carrying the SV40 region of replication. It gives high titers when used to produce retroviruses. It has been widely used for retroviral production, gene expression and protein production.
**Culture Medium:** The base medium for this cell line is Dulbecco's Modified Eagle's Medium (DMEM). To make the complete growth medium, add the following components to the base medium: 10% Fetal Bovine Serum (heat inactivated), 2mM L-glutamine.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:3. is seeding at 3-5 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C. Medium renewal: Every 2 to 3 days.
**ATCC Number:** CRL-3216™
**ECACC Number:** 12022001
**Isoenzymes:** LDH,G6PD

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Pear et al., Proc. Natl. Acad. Sci. USA 90: 8392-8396 (1993), PubMed ID 7690960 Rio et al., Science 227: 23-28 (1985), PubMed ID 2981116 DuBridge et al., Mol. Cell Biol. 7: 379-387 (1987), PubMed ID 3031469.
**Karyology:** 2n=46, (near) triploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 3 \| 2 \| 5 \| 6 \| 9 \| 3 |
|---|
| 51\|61\|65\|67\|68\|69\|70\|72 |

**Viability:** 96%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information. leukemia

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**NCBI Code:** C499
**Designation:** SW 948
**Species:** Human
**Tissue:** Colon
**Morphology:** Epithelial-like
**Description:** SW 948 is a colonic adenocarcinoma cell line established from a grade III adenocarcinoma of the colon obtained from an 81-year-old Caucasian female. The cells synthesize relatively large amounts of carcenoembryonic antigen (CEA), and are tumorigenic in nude mice.
**Culture Medium:** Leibovitz's L-15 medium + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6; ie seeding at 3-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37'C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 55
**ATCC Number:** CCL-237
**ECACC Number:** 91030714
**Reference:** Cancer Res 1976, 38:4562.
**Karyology:** 2n=46, hypotriploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 1 \| 3 \| 4 \| 5 \| 8 \| 1 \| 1 |
|---|
| 56\|57\|58\|60\|61\|62\|63\|64\|65\|66\|67\|68\|69 |

**Viability:** 95%, 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C500
**Designation:** MDBK
**Species:** Bovine
**Tissue:** Kidney
**Morphology:** Epithelial-like
**Description:** MDBK cell line was derived from a kidney of a normal adult steer (Bos taurus). The cells are Bovine viral diarrhea virus (BVDV) free.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS or 10% HS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 120
**ATCC Number:** CCL-22
**ECACC Number:** 90050801
**Reference:** Proc Soc Exp Biol Med 1958, 98:574; J Nat Cancer Inst 1986, 76:87.
**Karyology:** 2n=60, hypodiploid, pseudodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **1** | **2** | **3** | **6** | **15** | **1** | **1** | **1** |
| **48** | **49** | **50** | **51** | **52** | **53** | **54** | **57** |

**Viability:** 98%, 2.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C501
**Designation:** NC-37
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell line was derived from peripheral blood of a normal 34-year-old Caucasian male. Each cell has an average 60 EBV genome copies. cells have been used in EBV superinfection studies in addition to chemical induction of the EBV genome. They are EBNA positive. This cell line should be handeled under Biosafety level 2 containment.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37'C.
**Sterility:** Tests for mycoplasma, bacteria, and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 19,28 | 6,7 | 9,14 | 16,19 | 15,16 | 13 | 10 | 14,16 | 14 | 9,11 | 15,17 | 26,31 | X,Y |

**ATCC Number:** CCL-214
**ECACC Number:** 89111414
**Reference:** Int J Cancer 1970, 6:436.
**Karyology:** 2n=46, pseudodiploid (hyperdiploid) cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 1 \| 2 \| 1 \| 2 \| 4 \|11\| 3 \| 3 \| 1 |
|---|
| 42\|43\|44\|45\|46\|47\|48\|49\|50\|53 |

**Viability:** 98%, 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C502
**Designation:** HGF3-PI 53
**Species:** Human
**Tissue:** Gingiva
**Morphology:** Fibroblast-like
**Description:** The HGF3-PI 53 cell line was initiated from an explant culture of a ginigival

biopsy in NCBI.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6; ie seeding at 2-3 x 10^4 cells/cm^2 using 0.25 % trypsin/EDTA, 5% CO2, 37'C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 23,24 | 7,9 | 8,12 | 16,17 | 15,18 | 12 | 11 | 12,15 | 8,11 | 9,11 | 13,14 | 30,32 | X |

**Viability:** 99%, 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C503
**Designation:** Sf 21
**Species:** Fall armyworm
**Tissue:** Ovary
**Morphology:** Spherical
**Description:** Sf 21 is the parental cell line for Sf 9 and it was derived from pupal ovarian tissue of the fall armyworm, Spodoptera frugiperda.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures between 3 x 10^5 to 1 x 10^6 cells/ml, 27`C. Gently resuspend cells in old culture medium by dislodging the cells by pipetting or gentle agitation and resuspend in fresh medium. Cells should stick to the culture flask..
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** In Vitro 1977, 13:213; Proc Nat Acad Sci LISA 1985, 82:8404.
**Viability:** 90%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C504
**Designation:** CHO CD28
**Species:** Chinese hamster
**Tissue:** Ovary
**Morphology:** Epithelial-like
**Description:** This is a transfected CHO cell line expressing the marker CD28.
**Culture Medium:** RPMI 1640 + 10% FBS + 0.05% Hygromycin.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:3, ie seeding at 3-5 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C..
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Proc Natl Acad Sci U S A. 1990 Jul; 87(13):5031-5.
**Karyology:** 2n=22
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | |
|---|---|---|---|---|
| **7** | **8** | **10** | **3** | **3** |
| **18** | **19** | **20** | **21** | **22** |

**Viability:** 95%, 6.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C505
**Designation:** KARPAS 707
**Species:** Human
**Tissue:** Bone marrow
**Morphology:** Lymphoblast-like
**Description:** Multiple myeloma cell line.
**Culture Medium:** RPMI + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 0.5-1 x 10^6 cells/ml, 5%CO2, 37`C
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative..
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,13 | 18,26 | 6,10 | 8 | 17,18 | 15 | 11 | 8 | 12,13 | 11 | 12 | 16,18 | 30,31 | X |

**Reference:** Lancet Apr 24;1(8278): 931-3 (1982); Science. 1982 May 28;216(4549):997-9.
**Karyology:** 2n=46, tetraploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 1 \| 3 \| 1 \| 2 \| 1 \| 7 \| 2 \| 3 \| 1 \| 1** |
|---|
| **46\|70\|73\|78\|80\|81\|84\|85\|86\|87\|88\|89\|90\|91\|92\|93\|94** |

**Viability:** 95%, 2.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C506
**Designation:** SW 480
**Species:** Human
**Tissue:** Colon
**Morphology:** Epithelial-like
**Description:** This cell line was established from a colon adenocarcinoma obtained from a 51-year-old Caucasian male. The cells produce carcinoembryonic antigen (CEA), keratin, transforming growth factor beta and GM-CSF and express receptors for epidermal growth factor (EGF). The cells are also tumorigenic in nude mice. The cell line is suspected to carry human immunodeficiency virus (HIV).
**Culture Medium:** Leibovitz's L-15 medium with 2mM L-glutamine + 10% FBS. The cell line was adapted to RPMI + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:8, ie seeding at 2-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37'C.
**Sterility:** Tests for mycoplasma, bacteria, and fungi were negative.
**Passage No:** 100
**ATCC Number:** CCL-228
**ECACC Number:** 87092801
**Reference:** Cancer Res 1976, 36:4562; J Cancer Inst 1977, 58:207, ibid 1977, 59:221, ibid 1979, 63:635; J Virol 1987, 61:209; Int J Cancer 1988, 41:287; Cancer Res 1989, 49:1572; Nature 1989, 342:705; Proc Nat Acad Sci USA 1990, 87:7555; Virology 1991, 182:802;
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 5 \| 2 \| 5 \| 7 \| 4 \| 1 \| 3 \| 1 |
|---|
| 51\|52\|53\|54\|55\|56\|57\|58\|60 |

**Viability:** 90%, 2.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C507
**Designation:** CIR-A2
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** CIR-A2 is a MHC class I-defective lymphoblastoid cell line transfected with HLA A2.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Immunol 1992, 148:1941.
**Immunophenotyping:** Not identified
**Karyology:** 2n=46, hypodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 5 \| 4 \| 3 \| 8 \| 5 \| 2 \| 1 |
|---|
| 39\|40\|41\|42\|43\|44\|45\|46 |

**Viability:** 97%, 1.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C508
**Designation:** LS 180
**Species:** Human

**Tissue:** Colon
**Morphology:** Epithelial-like
**Description:** This cell line was established from a colon adenocarcinoma obtained from a 58-year-old Caucasian female. The cells produce carcinoembryonic antigen (CEA), mucin, IL-10 and IL-6 and are tumorigenic in nude mice.
**Culture Medium:** Eagle's MEM with NEAA + 1mM Earle's BSS + 10% FBS. The cell line was adapted to RPMI + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent culture 1:2 to 1:4; ie seeding at 2-5 x 10^4 cells/cm^2 by scraping, 5% CO2, 37'C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 35
**ATCC Number:** CL-187
**ECACC Number:** 87021202
**Reference:** In Vitro 1976, 12:180; Cancer Genet Cytogenet 1983, 10:351; Cancer Res 1990, 50:2997; Proc Nat Acad Sci USA 1990, 87:7555; Int J Cancer 1993, 55:96; Proc Nat Acad Sci USA 1996, 93:4001.
**Karyology:** 2n=46, aneuploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | |
|---|---|---|---|---|---|---|
| **1** | **2** | **1** | **4** | **14** | **7** | **1** |
| **41** | **42** | **43** | **44** | **45** | **46** | **47** |

**Viability:** 99%, 4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C509
**Designation:** T2
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This line is a variant of the T1 cell line (ATCCCRL-1991) produced by selection the SFR1-MI.3 monoclonal antibody (against a monomorphic determinant on HLA DR). The cells do not express HLA DR and are Class II major histocompatibility (MHC) antigen negative. The cells synthesize, but do not express, HLA B5.
T2 appears to have lost both copies of the CEMR.3 derived chromosome 6.
Together the T1 and T2 lines are useful for studying antigen processing and T cell recognition of class I MHC antigens.

**Culture Medium:** Iscove's modified Dulbecco's medium + 20% FBS. The cell line was adapted to RPMI + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37'C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22 | 6,7, 10 | 8,11 | 14,16 | 15,16 | 12,14 | 10,11 | 10,13, 14 | 11,12 | 12 | 11,12 | 27,29, 30 | X |

**ATCC Number:** CRL-1992
**Reference:** Immunogenetics 1985, 21:235; EMBO J 1986, 5:943; J Immunol 1999, 163:1037; Br J Cancer 2002, 87:414.
**Karyology:** 2n=46, neartetraploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 6 \| 2 \| 6 \| 3 \| 2 \| 1 |
|---|
| 52\|58\|59\|65\|68\|69\|72\|73\|74\|75\|78\|79\|80\|81\|82\|84 |

**Viability:** 97%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C510
**Designation:** SW 837
**Species:** Human
**Tissue:** Rectum
**Morphology:** Epithelial-like
**Description:** This cell line was established from a grade IV adenocarcinoma of rectum obtained from a 53-year-old Caucasian male. The cells produce carcinoembryonic antigen (CEA) and keratin and are tumorigenic in nude mice.
**Culture Medium:** Leibovitz's L-15 meduim + 10% FBS. The cell line was adapted to RPMI + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6; ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37'C.
**Isoenzymes:** LDH,G6PD,NP

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 45
**ATCC Number:** CCL-235
**ECACC Number:** 91031104
**Reference:** Cancer Res 1976, 36:4562; Cancer Genet Cytogenet 1982, 6:93; Cytogenetics 1983, 10:351; Nature 1989, 342:705; Proc Nat Acad Sci USA 1990, 87:7555.
**Karyology:** 2n=46, hypodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 7 \|17\| 3 |
|---|
| 35\|38\|39\|40\|41 |

**Viability:** 97%, 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C511
**Designation:** PEER
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast -like
**Description:** This cell line was established from the peripheral blood of a 4 year-old female with T cell acute lymphoblastic leukemia (T-ALL).
**Culture Medium:** RMPI 1640 + 20% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 0.5-1 x 10^6 cells/ml, 5%CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were ne
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11,13 | 24,25 | 8,9 | 7,10 | 16 | 15,17 | 11,12 | 11 | 10 | 13 | 11,12 | 12,13 | 29,31 | X,Y |

**Reference:** Int J Cancer 1980, 25: 705; Leukemai 1994, 8:425.
**Viability:** 96%, 6x10^6 cells/vial.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the

information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C512
**Designation:** 1301
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** 1301 is a subline of CCRF-CEM.It has unusally long telomeres, useful in tests where telomeres length is determined, where it can be used as internal cells with a known telomeres length.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS +10% DMSO
**Subculture Routine:** Maintain cultures at 3-9x10^5 cells/ml, 5%CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 01051619
**Reference:** Develop Biol Standard 1979; 42:193-7, Hultdin, M et al Nucleic Acids Research 1998; 26:16, 3641-3656.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **2** | **28** |
| **44** | **46** |

**Viability:** 98%, 2.6x10^6 cells/vial.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C513
**Designation:** TM4
**Species:** Mouse
**Tissue:** Testis, Sertoli cell
**Morphology:** Epithelial-like
**Description:** This cell line was established from primary culture of sertoli cell enriched preparations from normal testis of 11-13 day old Balb/c nude mice. Cells respond to FSH but not LH.Plasminogen activator secretion is stimulated by FSH and also retinoic acid. Cells

express androgenic , ostrogen and progestrone receptors.Cells express androgen, oestrogen and progestrone receptors and produce transferrin, H-Y Ag and novel retinol-binding protein.
**Culture Medium:** 1:1 mixture of Ham`s F12 + DMEM + 15mM HEPES + 5% HS +2.5 %FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split sub-confluent cultures (70-80%) 1:20 to 1:200 ie seeding at 1x10^4 cells/cm^2 using trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1715
**ECACC Number:** 88111401
**Reference:** Biol Reprod 1980, 23:243. Ann Ny Acad Sci 1982, 383:44; J Biol Chem 1984, 259 :3117; J Ultrastruct Res 1984, 87: 263.
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **4 \| 3 \| 1 \| 3 \| 2 \| 5 \| 3 \| 5 \| 2 \| 1 \| 1** |
|---|
| **81\|82\|83\|84\|85\|86\|87\|88\|89\|90\|91** |

**Viability:** 92%, 1X10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C514
**Designation:** TM3
**Species:** Mouse
**Tissue:** Testis, Leydig cell
**Morphology:** Epithelial-like
**Description:** This cell line was established from primary culture of Leydig cell enriched preparations from normal testes of 11-13 day old Balb/c nude mice. They have characteristics similar to primary cultres of Leydig cells.The cells respond to LH but not FSH. In the presence of LH the cells are capable of metabolising cholestorl . These cells are non-tumorogenic in immunosuppressed mice, but did form clonies in semisolid medium.
**Culture Medium:** 1:1 mixture of Ham`s F12 + DMEM + 15mM HEPES + 5% HS +2.5 %FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split sub-confluent cultures (70-80%) 1:20 to 1:200 ie seeding at 1x10^4 cells/cm^2 using trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**ATCC Number:** CRL-1714
**ECACC Number:** 91060526
**Reference:** Bio Repro 1980, 23:243; Ann NY Acid Sci 1982, 383:44.
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 1 \| 1 \| 2 \| 1 \| 1 \| 3 \| 1 \| 1 \| 2 \| 1 \| 1 \| 2 \| 1 \| 2 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 |
|---|
| 42\|43\|44\|45\|46\|47\|48\|49\|51\|53\|56\|58\|59\|62\|68\|70\|72\|73\|74\|76\|81\|82\|87 |

**Viability:** 83%, 1x10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C515
**Designation:** NB-4
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Single round and polymorphic cells in suspension
**Description:** This cell line was established from the bone marrow of a 23-year-old female with acute promyelocytic leukemia (APL = AML FAB M3 ) in second relapse in 1989; paten cell line; cells carry the t (15;17)PML-PARA fusion gene.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** maintain at 0.5-1.0 x 10^6 cells/ml;optimal split ratio at 1:2 to 1:3 every 2-3 day seed out at ca. 0.5-1 x 10^6 cells/ml;viability may be low after thawing,but cells will recover soon when cultured initially with 20% FBS ;cells might also grow in 24-well-plates than in culture flasks.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were ne
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 20,21 | 6,9 | 7,10 | 15,18 | 14,16 | 13 | 10,13 | 10,13 | 9,10 | 13 | 11,13 | 26,33 | X |

**ECACC Number:** DSMZ no:ACC 207
**Reference:** Lonatte et al.,blood 77:1080-1086(1991),PubMed ID 1995093

**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 2 \| 3 \| 5 \| 2 \| 8 \| 1 \| 2 \| 1 \| 3 |
|---|
| 69\|70\|71\|72\|74\|76\|77\|78\|79\|80\|81\|82 |

**Viability:** 96% ; 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C516
**Designation:** MOLT-17
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Round to elongated single cells in suspension
**Description:** This cell line was established from the peripheral blood of a 5-year -old girl with T cell acute lymphoblastic leukemia (T-ALL).Sister cell line to MOLT-16.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 0.5-2.0 x 10^6 cells/ml,5% CO2,37C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** DSMZ NO.ACC 36
**Reference:** Hemalot Oncol 1989,7:115.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|29 |
|---|
| 45\|46 |

**Viability:** 88% ; 1.6 x 10^6 cell/vials
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C517
**Designation:** Hepa 1-6
**Species:** Mouse
**Tissue:** liver
**Morphology:** Epithelial-like
**Description:** Derived from BW7756 tumour in a C57L mouse. The line has been extensively characterized and secretes several liver-specific products ( such as albumine, alpha fetoprotein, alpha 1 -antitrypsin and amylase ). The cells can be propagated in a serum-free medium consisting of DMEM, 75% ;Waymouth's MAB 87/3 medium,25% ; plus 3 x 10^8 M selenium.
**Culture Medium:** DMEM + 2mM glutamine + 4.5 g/L glucose + 10% FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:4 ie seeding at 2-5 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37'C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were ne
**ATCC Number:** CRL1830
**ECACC Number:** 92110305
**Reference:** J Nat Cancer Inst. 1980;64:809;Methods Enzymol 1987;151:19
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **1 \| 2 \| 2 \| 3 \| 5 \| 3 \| 2 \| 4 \| 2 \| 3 \| 2 \| 1** |
|---|
| **51\|55\|60\|65\|74\|46\|80\|81\|87\|89\|94\|96** |

**Viability:** 95% ; 2.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C518
**Designation:** COS-1
**Species:** African Green Monkey
**Tissue:** Kidney
**Morphology:** Fibroblast-like
**Description:** The COS-1 cell line is a fibroblast-like cell line established from CV-1 simian cells (ATCC CCL-70) which were transformed by an origin defective mutant of SV40 that codes for wild type T antigen. This cell line contains T antigen, retains complete permissiveness for lytic growth of SV 40, supports the replication of ts A209 virus at 40`C and pure populations of SV40 mutants with deletions in the early region. This cell line contains a single integrate copy of the complete early region of SV40 DNA. This is a suitable host for

transfection, especially for vectors requiring expression of SV40 T antigen.
**Culture Medium:** DMEM + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split semi-confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1650
**ECACC Number:** 88031701
**Reference:** Cell 1981, 23:175.
**Karyology:** 2n=60
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2** | **5** | **4** | **1** | **1** | **1** | **1** | **2** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **'2'** | **'1'** | **'1'** |
| **51** | **52** | **53** | **54** | **55** | **78** | **79** | **80** | **82** | **83** | **84** | **87** | **89** | **91** | **93** | **95** | **96** | **100** | **101** | **104** |

**Viability:** 93%, 4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C519
**Designation:** Daoy
**Species:** Human
**Tissue:** brain
**Morphology:** Polygonal adherent
**Description:** This cell line was established from a biopsy material taken from a tumor in the posterior fossa of a 4 year old Caucasian boy. Although the original tumor had characteristics of both nueronal and glial differential , these were not retained by the cell line. The cell are tumorogenic in nude mice.
**Culture Medium:** EMEM (EBSS)+1.5 g/L Sodium Bicarbonate + 2mM glutamine + 0.1 mM NEAA+ 1mM SP + 10% FBS. The cell line was adapted to RPMI 1640 +10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:4 to 1:6 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplsma, bacteria and
**ATCC Number:** HTB-186
**Reference:** Cancer Res, 1992, 52:1144-48; Neuropathol Exp Neurol 1985, 44: 472-85.
**Viability:** 96% , 1.5x10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide

sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C520
**Designation:** KG-1a
**Species:** Human
**Tissue:** Bone marrow acute myelogenous
**Morphology:** Lymphoblast-like
**Description:** Derived from KG-1, however KG1a is unresponsive to colony stimulating factor in soft agar culture and dose not express the la-like antigen. KG1a is resistant to phorbol-dieester induced macrophage differentiation and cell proliferation.
**Culture Medium:** Iscove's DMEM + 2mM glutamine + 20%FBS
**Preservation Medium:** FBS + 5% DMSO.
**Subculture Routine:** Maintain cultures between 5 x 10^5 - 1 x 10* cells/ml.Do not culture below 10^5 cells/ml.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were ne
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 22 | 7,8 | 7,10 | 15,19 | 15,16 | 13,14 | 8,10 | 14 | 11,12 | 10,11 | 10,15,17,19 | 29 | X,Y |

**ATCC Number:** CCL -246.1
**ECACC Number:** 91030101
**Reference:** Blood 1983;62:709-721
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 3 \| 5 \|17\| 1 \| 1 |
|---|
| 41\|43\|44\|45\|46\|47\|48 |

**Viability:** 98% ; 4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C521
**Designation:** C2C12
**Species:** Mouse
**Tissue:** Muscle
**Morphology:** Myoblast
**Description:** Subclone from myoblast line established from normal adult C3H mouse leg muscle. Differentiates rapidly;produces extensive contracting myotubes expressing characteristic muscle proteins.Provides model to Study in vitro myogenesis and cell differentiation.
**Culture Medium:** DMEM + 2mM glutamine + 10-15% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:8, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37'C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL 1772
**ECACC Number:** 91031101
**Reference:** Nature 1977;270:725
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 2 \| 2 \| 2 \| 1 \| 1 \| 1 \| 2 \| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 1 \| 1 |
|---|
| 41\|44\|47\|48\|51\|52\|55\|57\|58\|59\|61\|63\|64\|65\|66\|67\|68\|69\|70\|71\|72\|73\|74\|75 |

**Viability:** 95% , 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C522
**Designation:** NS-1
**Species:** Mouse
**Tissue:** Hematopoietic
**Morphology:** lymphoblast-like
**Description:** The P3/NSI/1-Ag4-1 (or NSI/1-Ag4-1 or NS-1)is a non-secreting,drug marked derivative of the NSI/1(previously named 289/16).The NSI/1 or 289/16 is a clone of the X27(P3-X27).The X27 is the parental clone for both the NS-1and the P3X663Ag8(see ATCC TIB-9).All of these clones and derivatives were derived from the parental P3K,a cell line established by K.Horibata and A. Harris from the transplantable mineral oil induced

plasmacytoma MOPC-21 (Exp.cell Res.60:61-77,1970).NS-1 cells are resistant to 10^4 M 8-azaguanine, do not grow in HAT medium and have been used extensively in cell fusion studies.NS-1 cells synthesize k chain but do not secrte free light chain.Intracellular k chains are only secreted in a hybrid cell when attached to heavy chain.
**Culture Medium:** DMEM + 4.5 g/L glucose,90% ,FBS,10%
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 2 X 10(5) viable cells/ml. Maintain cell density between 1 X 10(5) and 1 X 10(6) viable cells/ml. Do not allow the cell density to exceed 1 X 10(6) cells/ml. Medium Renewal: Every 2 to 3 days**.**
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** TIB-18
**Reference:** Eur.J.Immunol.6:292-295 and 511-519,1979;J.Mol.Biol.90:691-701,1974;Nature(Lond.)249:573-574,1974.
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2** | **2** | **1** | **2** | **5** | **2** | **3** | **2** | **7** | **2** | **1** | **1** | |
| **52** | **53** | **54** | **55** | **56** | **57** | **58** | **59** | **60** | **61** | **66** | **67** | |

**Viability:** 95% , 5 x 10^6
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C523
**Designation:** RK13
**Species:** Rabbit
**Tissue:** Kidney
**Morphology:** Epithelial-like
**Description:** Derived from kidney cells of a 5 week old rabbit. Susceptible to HSV, PRV, Vaccinia, rabbit pox, myxoma and Simian adenovirus. Sensitive to rubella virus and produces cytopxxathic effect.
**Culture Medium:** EMEM (EBSS) + 2mM glutamine + 1%NEAA + 10% FBS. EMEM has been replaced with DMEM in NCBI.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:8, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37'C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**ATCC Number:** CCL37
**ECACC Number:** 88062427
**Reference:** Lancet 1963;2:640
**Karyology:** 2n = 44
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **1** | **3** | **7** | **2** | **10** | **1** | **1** | **1** | **1** |
| **53** | **55** | **58** | **59** | **62** | **64** | **65** | **66** | **67** | **68** | **69** | **70** |

**Viability:** 97% , 1.2 x 10^6
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C524
**Designation:** HMCB
**Species:** Human
**Tissue:** Skin
**Morphology:** Epithelial-like
**Description:** HMCB cells produce human tissue plasminogen activator.the cells tested positive for mycoplasma.Handle as potentially biohazardous material under at least biosafety level 2 containment.
**Culture Medium:** EMEM + NEAA + 10mM HEPES and 1mM Sodium Pyruvate 90% ; FBS,10%**.** EMEM has been replaced with DMEM in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37C to facilitate dispersal. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. A subcultivation ratio of 1:6 to 1:10 is recommended
Medium Renewal: Two to three times weekly.
**Sterility:** Tests for mycoplasma, bacteria and fungi were ne
**ATCC Number:** CRL-9607
**Reference:** U.S>Pat.4.766,075.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **3** | **2** | **1** | **7** | **5** | **3** | **5** | **1** | **1** | **1** | **1** |
| **66** | **67** | **68** | **69** | **70** | **71** | **72** | **73** | **74** | **75** | **76** |

**Viability:** 96% ; 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C525
**Designation:** C1R-sB7
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** C1R-sB7 is a stable transfectant cell line with a modified histocompatibility complex (MHC) HLA B7 gene. It secretes HLA B7 but does not express surface HLA B7. C1R-sB7 was established by transfection by electroporation of the C1R cell line with a modified neomycin drug-resistant eukaryotic vector,pSP65-Neo carring the gene for soluble B7(sB7). C1R is a human B-cell lymphoblastoid line lacking surface HLA A and B antigens. It was selected in geneticin and cloned by limiting dilution. and was derived from Hmy. 2B-LCL by gamma irradiation followed by selection for class I monoclonal antibodies and complement.
**Culture Medium:** Iscove`s modified Dulbeccos medium with 4mM L-glutamine adjusted to contain 1.5 g/l sodium carbonate + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 5-8 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6,10 | 20,22 | 8,9 | 7 | 17 | 15 | 10,13 | 7,12 | 14 | 10,12 | 8,11 | 12,14 | 28,29 | X |

**ATCC Number:** CRL-2370
**Reference:** Proc Nat Acad Sci USA 1989, 86:2361-4, Hum Immunol 1994,40:228-234, ibid 1994, 40:235-246, ibid 1994, 40:153-165.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 4 \| 5 \| 9 \| 3 \| 5 \| 2 \| 1 \| 1 |
|---|
| 42\|43\|44\|45\|46\|47\|48\|49 |

**Viability:** 95%, 4x10^6 cells/vial.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C526
**Designation:** RIN-5F
**Species:** Rat
**Tissue:** Pancreas
**Morphology:** Epithelial-like
**Description:** RIN-5F is a secondary clone of the ratislet tumor cell line RIN-m (ECACC NO. 95071701). The cells produce and secrete insulin, and produce L-dopa-decarboxylase (a marker for cells having amine precursor uptake and decarboxylation, or APUD, activity). Unlike the parental line they don`t produce somatostatin.
**Culture Medium:** RPMI 1640 + 2mM L-glutamine + 1.5 g/l sodium bicarbonate + 4.5 g/l glucose +10 mM HEPES + 1 mM SP + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split subconfluent cultures (70-80%) 1:3 to ie seeding at 2-4 x 10^4 cells/ml, 5% CO2, 37`C Cells grow in small island and don`t from a confluence monolayer.
**Sterility:** Tests for mycoplasma, bacteria and fungi were n
**ATCC Number:** CRL-2058™
**ECACC Number:** 95090402
**Reference:** Proc Natl Acad Sci USA 1977;74:628; ibid 1980;77:3519; Diabetes 1982;31:521; Endocrinology 1983;112:1070; Proc Soc Exp Biol Med 1983;175:35.
**Karyology:** 2n=42
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | |
|---|---|---|---|
| **4** | **3** | **22** | **1** |
| **42** | **43** | **44** | **62** |

**Viability:** 92% ; 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C527
**Designation:** CHO 1-15 500
**Species:** Chinese hamster
**Tissue:** Ovary
**Morphology:** Epithelial-like
**Description:** The line was produced by transfecting CHO cells with a plasmid (pETPER,ATCC 40403) to produce a system in which human tissue plasminogen activator is produced.
**Culture Medium:** Ham's F12 medium ,90% ;FBS,10%
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Remove medium, rinse once with phosphate buffered saline and once with fresh 0.25% trypsin - 0.02% EDTA. Remove trypsin and allow the culture to stand for 5 minutes at 37C. Add fresh medium, aspirate and dispense into new flasks.
Subcultivation Ratio: A subcultivation ratio of 1:5 to 1:10 is recommended.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-9606
**Reference:** U.S.Pat.4,766,075.
**Karyology:** 2n=22
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | |
|---|---|---|---|
| **1** | **9** | **9** | **11** |
| **18** | **19** | **20** | **21** |

**Viability:** 97% , 5 x 10^6
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C528
**Designation:** IEC-18
**Species:** Rat
**Tissue:** Ileum
**Morphology:** Epithelial
**Description:** Derived from normal epithelial cells of the rat ileum. Cells shuld undegro at least 20 population doublings.The line was established using the same techniques as for IEC 6.
**Culture Medium:** DMEM + 2mM glutamine + 0.1 IU/ml Insulin + 5-10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37'C.
**Isoenzymes:** LDH,G6PD,NP

**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**ATCC Number:** CRL 1589
**Reference:** J cell Biol 1979;80:248:J Nat Cancer Inst 1981;67:1353
**Karyology:** 2n=42
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **6** | **11** \| **2** \| **11** |
| **40** | **42** \| **43** \| **44** |

**Viability:** 94% , 1.4 x 10^6
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C529
**Designation:** T2.DR4
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** The T2.DR4 cell line was generated through transfection of HLA-DRB1*0401 cDNA into T2 cells. The T2.DR4 cell line is HLA-DM deficient, making its cell surface DRB1*0401 complexes receptive to loading by exogenous peptides.
**Culture Medium:** RPMI 1640 (Life Technologies, Inc.) supplemented with 10% FCS, L-arginine (116 mg/l), L-asparagine (36 mg/l), and L-glutamine (216 mg/l).
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 5-8 x 10^5 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**Reference:** Cancer Research 60, 4946–4952, September 1, 2000; 400–405 u PNAS u January 4, 2000 u vol. 97 u no. 1
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **1** \| **1** \| **2** \| **2** \| **2** \| **1** \| **1** \| **4** \| **3** \| **11** \| **1** \| **1** | |
| **68** | **69** \| **70** \| **71** \| **72** \| **73** \| **75** \| **76** \| **77** \| **78** \| **79** \| **80** |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C530
**Designation:** CCRF-HBS-2
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This cell ine is a T lymphoblastoid line obtained from the peripheral blood of an 11 year old Caucasian male with acute lymphoblastoid leukemia which has been passaged eight times through new born Syrian hamsters.
**Culture Medium:** DMEM + 2mM Glutamine + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maitain culture at 5-8x 10^6 cells/ml, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-120.1
**ECACC Number:** 85112801
**Reference:** Proc Am Assoc Cancer Res ,8:1. Cancer Res 1968, 28:1121.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **2 \| 2 \| 2 \|22\| 1 \| 1** |
|---|
| **41\|44\|45\|46\|47\|48** |

**Viability:** 96%, 1.8x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C531
**Designation:** U-87 MG
**Species:** Human
**Tissue:** Brain
**Morphology:** Epithelial-like
**Description:** This is one of a number of cell lines derived from a malignant gliomas.Cultures were established as explants on grid-supported lens paper or gelatin foam with Eagle`s minimum essential medium and 10% bovine calf serum as the culture fluid.Trypsinization of

the outgrowth or cells attached to the vessel floor with subsequent transfer to standard vessels in growth medium permitted cell line development.
**Culture Medium:** EMEM (EBSS)+ 2mM glutamine +1% NEAA + 1 mM NaP + 10% FBS. EMEM has been replaced with DMEM in NCBI.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6 ie seeding at 2-4x 10^4 cells/cm2 using trypsin or trypsin/EDTA ;5%Co2;37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Passage No:** 10
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 20,25 | 9 | 8 | 16,18 | 16 | 11,12 | 10,12 | 13,15 | 10,11 | 12 | 12 | 28,29 | X |

**ATCC Number:** HTB-14
**ECACC Number:** 89081402
**Reference:** Acta Path Microbiol Scan 1968;74:465.
**Karyology:** 2n-46;the stemline chromosome number is hypodiploid.
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 2 \| 3 \| 7 \| 8 \| 4 \| 2 \| 1 |
|---|
| 38\|39\|41\|43\|44\|45\|46\|47\|48 |

**Viability:** 98% ; 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C532
**Designation:** CT26
**Species:** Mouse
**Tissue:** Colon
**Morphology:** Fibroblast-like
**Description:** CT26 is an N-nitroso-N-methylurethane-(NNMU) induced, undifferentiated colon carcinoma cell line. It was cloned to generate the cell line designated CT26.WT (ATCC CRL-2638).
**Culture Medium:** RPMI 1640 +10% FBS.

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. A subcultivation ratio of 1:4 to 1:10 is recommended .Medium Renewal: Every 2 to 3 days**.**
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**Reference:** Clinical & Experimental Metastasis 17: 849–855, 1999; Clin. Exp. Metastasis, 1998, 16, 683–691
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **2 \| 4 \| 9 \|10\| 5** |
|---|
| **50\|55\|57\|60\|61** |

**Viability:** 96% ; 1.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C533
**Designation:** CT26dsRed
**Species:** Mouse
**Tissue:** Colon
**Morphology:** Fibroblast
**Description:** CT26 tumor cells transfected to express DsRed (CT26-DsRed)**.**
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting.37C, 5% CO2 and 95% humidity**.**
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**Reference:** Int. J. Cancer: 117, 335–339 (2005)

**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | |
|---|---|---|---|---|
| **2** | **4** | **9** | **10** | **5** |
| **50** | **55** | **57** | **60** | **61** |

**Viability:** 92% ; 1.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C534
**Designation:** T7-BHK
**Species:** Hamster
**Tissue:** kidney
**Morphology:** Fibroblast-like
**Description:** These cells express T7 RNA polymerase**.**
**Culture Medium:** MEM-alpha containing 10% FCS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split semi-confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**Reference:** J Histochem Cytochem. 1993 Apr;41(4):521-33; Virology. 2002 Oct 25;302(2):299-309. J Gen Virol. 1993 Sep;74 ( Pt 9):1955-8; The Journal of Histochemistry and Cytochemistry, 41(4), 121-533, 1993.
**Viability:** 98% ; 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C535
**Designation:** SK-N-MC
**Species:** Human
**Tissue:** Brain
**Morphology:** Epithelial

**Description:** This is one of two cell lines (see ATCC HTB-11) of neurogenic origin derived by J.L.Biedler.SK-N-MC was isolated in september of 1971 and was found to have moderate dopamine - beta -hydroxylase activity as well as formaldehyde -induced fluorescence indicative of intracellular catecholamines (Spengler,et al.,In vitro (Rockville) 8:410.1973).A culture at passage 23 was deposited by G.Trempe and and L.J.Old in April,1972.It has been propagated in EMEM with 10-15 % FBS.
**Culture Medium:** EMEM with non-essential amino acids,sodium pyrovate and Earle^s BSS,90%;FBS,10%,antibiotic-free. EMEM has been replaced with DMEM in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent culture 1:3 to 1:6 every 3-5 days using trypsin/EDTA ;seed out at Ca. 1-4 x 10^6 cells/80 cm^2; cells may grow slowly initially incubation at 37 C with 5-10 % CO2.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 21,25 | 9,10 | 8,9 | 16,17 | 14 | 15 | 8 | 10 | 11 | 8,11 | 12,13 | 29,31 | X |

**ATCC Number:** HTB 10
**ECACC Number:** DSMZ NO: ACC 203
**Reference:** Biedler et al./Cancer Res,33: 1973,2643 ,PubMed ID 47484225
**Viability:** 90% ; 1.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C536
**Designation:** RBL-2H3
**Species:** RAT
**Tissue:** Hematopoietic
**Morphology:** Fibroblost
**Description:** Rat basophilic leukemia the rat basophilic leukemia (RBL) line was originally obtained by Eccleston et al. and was maintained by serial passage in neonatal Wistar rats,four cell lines (named RBL I-IV)were started from this tumor between 1973 and 1975;the subline RBL-IV HR+ Was derived from RBL-IV; further subcloning established the cell line RBL-2H3 ;cells are descibed to release histamin as an IgE- mediated reaction confirmed as rat with IEF of AST,LDH,NP.
**Culture Medium:** 70% MEM(with Earle's salts)+20% RPMI 1640 + 10% FBS. MEM has

been replaced with DMEM in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent culture 1:5 every 3 days usinig trypsin/EDTA;Seed out at Ca.1-2x10^6 cells/80 cm^ 2at 37C Without CO2 (keep lid of flask closed )cell harvest of Ca.15-20 x 10^6 cells/175 cm^2 ; doubling time of Ca.50-60 hours.
**Isoenzymes:** LDH,G6PD,NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**ATCC Number:** CRL-2256™.
**ECACC Number:** DSMZ ACC 312
**Reference:** Eccleston et al., Nature New Biol.244: 73-75(1973);Kulczycki et al.,J.Exp.Med.139:600-616(1974);Barsumian et al., Eur.J.Immunol.11:317-323(1981);Hoffmann et al.,J.Allergy Clin.Immunol.99:227-232(1997)
**Karyology:** 2n=46, neartetraploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | |
|---|---|---|---|---|---|---|
| **4** | **1** | **14** | **3** | **4** | **3** | **1** |
| **60** | **61** | **62** | **63** | **64** | **65** | **68** |

**Viability:** 92% ; 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C537
**Designation:** STO
**Species:** Mouse
**Tissue:** Embryo
**Morphology:** Fibroblast
**Description:** Selected for thioguanine and ouabain resistance,sensitive to HAT; HPRT negative .Used routinely as feeder layers prepared by irradiation or mitomicin treatment.Specifically for maintenance of teratocarcinoma stem cells in undifferetiated state.
**Culture Medium:** DMEM + 2mM glutamine + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6 ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsinal/EDTA ; 5% CO2 ; 37 C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**ATCC Number:** CRL 1503
**ECACC Number:** 86032003
**Reference:** Proc Nat Acad Sci ,USA 1975 ;72 :1441:CELL 1975:6;467:dEV boil 1977;61:230

**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 4 \| 5 \| 7 \| 7 \| 6 |
|---|
| 50\|52\|56\|57\|58\|60 |

**Viability:** 92% ; 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C538
**Designation:** CTLL-2
**Species:** Mouse
**Tissue:** Hematopoietic
**Morphology:** lymphoblast
**Description:** CTLL-2 is a clone of cytotoxic T cells derived from a C57BL/6 mouse.This line is depended on interleukine-2 (IL-2),formerly called T cell Growth Factor (TCGF),for growth and has been used as a convenient assay for this factor.
**Culture Medium:** RPMI 1640 + 10% FBS,15mM HEPES,2mM L-glutamine and 2mM sodium pyruvate ,60% ;rat growth factor,40%.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** maintain cultures between 3-9 x 10000 cells /ml;5% CO2,37 ºC
**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**ATCC Number:** TIB 214
**ECACC Number:** 93042610
**Reference:** Nature (LOND.);268 :154-156,1977.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 2 \| 1 \| 1 \| 1 \| 2 \| 3 \| 1 \| 2 \| 2 \| 1 \| 3 \| 2 \| 1 \| 1 \| 2 |
|---|
| 58\|59\|60\|62\|63\|64\|65\|66\|67\|68\|69\|70\|73\|74\|75\|76\|78\|79\|80\|81 |

**Viability:** 98% ; 1.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C539
**Designation:** Cre-8
**Species:** Human
**Tissue:** kidney
**Morphology:** Epithelial-like
**Description:** This cell line makes a high concentration of Cre recombinanse.It will be used for developing recombinant Adenoviruses.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C..
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 23,24 | 7,10 | 11 | 16,19,20 | 15,17 | 10 | 11,12 | 12,14 | 12,15 | 9,13 | 16 | 27,30 | X |

**Reference:** Journal of virology,Mar.1997,p.1842-1849.
**Karyology:** 2n=46, hypodiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 3 \| 5 \| 7 \| 5 \| 3 \| 3 \| 1 \| 1 |
|---|
| 46\|54\|55\|57\|60\|61\|68\|70\|71 |

**Viability:** 97% , 2 x 10^6 cell/vials
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C540
**Designation:** B16/F10
**Species:** Mouse
**Tissue:** Skin
**Morphology:** Epithelium
**Description:** Pigment production;adhesion;antitumour testing;metastasis;cell cycle

**Culture Medium:** DMEM + 10% FBS + 2mML-Glutamine
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** 37C, 5% CO2 ,Split 1-5 Passage : 10-12
**Isoenzymes:** G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**ATCC Number:** CRL-6475™
**Reference:** Cancer Res 1975;35:218-224-PMID:1109790
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 3 \| 5 \| 9 \| 8 \| 4 \| '1' |
|---|
| 70\|73\|74\|75\|76\|107 |

**Viability:** 97% ; 1.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C541
**Designation:** IRKHBK
**Species:** Bovine
**Tissue:** Kidney
**Morphology:** Epithelial-like
**Description:** At first this cell was caltivated from a normal kidney of a 2 days old male Holshtine calf in Razi's animal virulogy Research Inst. This cell is very sensitive to viruses such as PI3, BH4, BVD, IBR. (for future viral study)
**Culture Medium:** MEM + 10% FBS. MEM has been replaced with DMEM in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split subconfluent cultures seeding at 5 x 10^3 to 2 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**Passage No:** 200
**Reference:** 8 th Iranian Genetic congress.
**Karyology:** 2n=60
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 4 \|10\| 8 \| 3 \| 3 |
|---|
| 40\|41\|42\|43\|44\|45 |

**Viability:** 98% ; 2.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C542
**Designation:** BW5147
**Species:** Mouse
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This line is a mutant sub-line of BW5147 which was derived from an AKR/J mouse lymphoma (Thymoma).
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split subconfluent cultures seeding at 5 x 10^3 to 2 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Nat Cancer Inst 1974 ;52:429
**Viability:** 92% ; 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C543
**Designation:** Mehr-80
**Species:** Human
**Tissue:** Lung
**Morphology:** Epithelial like
**Description:** This cell line was established from a patient referred to Namazi Hospital of Shiraz Univesity of Medical Sciences with a diagnosis of poorly differentiated carcinoma.Sterile sample from peritoneal effusion was taken and immediately cultured in RPMI-1640 medium containing 20% FBS,at 37C with 5% CO2 .This cell line has been in continuous culture for more than one year and has been named as Mehr-80 .Several features of the cell line were investigated,including growth characteristics,electron microscopic features,cloning efficiency in soft agar,expression of various antigenic markers,chromosomal and DNA analysis.On the basis of morphological and immunohistochemical analysis of Mehr-

80,it is possible to conclude that this cell line is characterized by features similar to those reported for large cell carcinoma with neuroendocrine differentiation (LCCND).This cell line will be avaluable invito tool for further studies on lung cancers.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maitain culture at 1-2 x 10^6 cells/ml, 5% CO2, 37`C.
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11,12 | 22 | 6 | 10 | 17 | 16,18 | 11,16 | 11,12 | 10,13 | 8 | 8,10 | 12 | 27,28 | X |

**Reference:** Pathology Oncology Reseach Vol 10,No 4,225-230)
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 3 \| 1 \| 2 \| 1 \| 2 \| '1' \| '1' \| '1' \| '1' \| '1' \| '1' |
|---|
| 55\|56\|66\|68\|69\|72\|73\|75\|79\|82\|83\|84\|85\|86\|90\|94\|95\|96\|98\|99\|101\|102\|104\|109\|110\|112 |

**Viability:** 90% ; 1.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C544
**Designation:** JEG-3
**Species:** Human
**Tissue:** Embryo
**Morphology:** Epithelial
**Description:** Established from a human gestational choriocarcinoma which was taken at autopsy from a cerebral metastasis; cells were initially propagated in hamster cheek pouches by serials passage prior to cultivation in culture;serial sister cell line of cell line BEWO (DSM ACC 458).
**Culture Medium:** 90% Ham^s F12 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent culture 1:10 every 3-4 days using trypsin/EDTA ;seed out at Ca.1 x10^6 cells/80 cm^2;maintain at Ca.10 x 10^6 cells/175 cm^2 at 37 C with 5%

CO2.
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were neative.
**ATCC Number:** HTB-36™
**ECACC Number:** DSMZ ACC 463
**Reference:** Pattilo et al.,Cancer Res 28:1231-1236 (1968) ,Pubmed ID 4299001 Kohler et al.,J Clin Endocrinol Metab 32:683-687(1971),Pubmed ID 5103722
**Viability:** 85%, 1.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C545
**Designation:** 2J2-B4
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** B-cell chronic lymphocytic leukemia
**Culture Medium:** RPMI 1640 + 10%FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures between 3-9 x 10000 cells /ml;5% CO2,37 ºC.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negativ.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 20,22 | 6,8 | 8,11 | 17 | 13,14 | 11 | 8,10 | 13,14 | 8,12 | 8,11 | 14 | 27,33 | X |

**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 2 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 4 \| 2 \| 1 \| 1 \| 2 \| 3 \| 2 \| 1 \| 3 \| 1 |
|---|
| 46\|55\|62\|63\|65\|66\|67\|69\|72\|74\|75\|77\|79\|80\|82\|84\|85\|86\|89 |

**Viability:** 92% ; 2.6 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C547
**Designation:** Waco3-CD5
**Species:** Human
**Tissue:** Hematopoitic
**Morphology:** Lymphoblast-like
**Description:** B-cell chronic lymphocytic leukemia.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9,10 | 19,20 | 8,9 | 7,11 | 18 | 15,16 | 12 | 8,10 | 10,13 | 9 | 8,11 | 11,18 | 29,30 | X,Y |

**Viability:** 85% ; 1 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C548
**Designation:** AAV-293
**Species:** Human
**Tissue:** Kidney
**Morphology:** Fibroblast-like
**Description:** Stratagene recommends preparing adeno-associated recombinant virus stocks using the AAV-293 cell line.AAV-293 cells are derived from the commonly used HEK293 cell line,but produce higherviral titers.HEK293 cells are human embryonic kidney cells that have been transformed by sheared adenovirus type 5 DNA.AAV-293 cells,like HEK293 cells,produce the adenovirus E1 gene in trans,allowing the production of infectious adeno-associated virus particles when cells are co-transfected with the three AAV Helper-Free System plasmids(an ITR-containing plasmid,pAAV-RC,and the E1- deleted pHelper plasmid).
**Culture Medium:** DMEM + 10%FBS + 2 mM of L-glutamine

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Cells should be passaged when the cell monolayer reaches 50% confluence.If cell confluence exceeds 70%,AAV293 cells may lose the increased virus production feature.ie seeding at 1-3 x 10^6 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8,11 | 22,23 | 7,9 | 10,11 | 16,19 | 14,16 | 8,9 | 11 | 12,13 | 12 | 6,9 | 15 | 27,30 | X |

**Reference:** Graham,F.L.,Smiley,J.,Russell,W .c.and Narrin,R.(1997)J Gen Virol 36(1):59-74.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 1 \| 4 \| 5 \| 6 \| 4 \| 2 \| 2 \| 3 \| 1 |
|---|
| 46\|48\|49\|53\|59\|61\|63\|64\|65\|67 |

**Viability:** 99% , 1.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C549
**Designation:** C1300Clone NA
**Species:** Mouse
**Tissue:** Brain
**Morphology:** Epithelial
**Description:** CLONE NA is a subclone of Neuro-2a,a clonal line of C1300 mouse neuroblastoma cells.The cells were selected for spontaneous mutations deficient in HGPRT in the presence of 8-azaguanine.
**Culture Medium:** RPMI 1640 + 2mM glutamine + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6 is seeding at 2-4 x 10^4 cells/cm^2 Using trypsin/EDTA ; 5%CO2;37 C
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 93120817
**Reference:** Dev Biol 1974 ;39 ;226 ; J Clin Microbiol 1987 ; 25 :1456

**Viability:** 94% ; 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C550
**Designation:** P 815
**Species:** Mouse
**Tissue:** Hematopoitic
**Morphology:** Lymphoblast-like
**Description:** Established from the mastocytoma tumor of a DBA/2 mouse treated with methylcolanthrene;used as target cells for cytotoxic T cell assays;as reported cells exhibit no effector activity in an antibody-dependent cell mediated cytotoxic system.
**Culture Medium:** DMEM + 4 mM L-glutamine adjusted to contain 1.5 g/L glucose, 90%; FBS, 10%.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Cultures can be maintained by addition or replacement of fresh medium.Start cultures at 2 x 10 exp5 cells/ml and maitain between 1 x 10 exp5 and 1 x 10 exp6 cells/ml.Adherent cells can be recovered by scraping.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** TIB-64
**ECACC Number:** DSMZ ACC 1
**Reference:** Ralph P , et al. Lysozyme synthesis by established human and murine histiocytic lymphoma cell lines. J. Exp.Med. 143: 1528-1533, 1976. pubMed: 1083890
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | |
|---|---|---|---|---|---|---|
| **1** | **3** | **5** | **10** | **7** | **3** | **1** |
| **35** | **36** | **38** | **41** | **42** | **43** | **45** |

**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C551
**Designation:** BCL1 clone 5B1b
**Species:** Mouse
**Tissue:** Spleen
**Morphology:** lymphoblast
**Description:** BCL1 clone 5B1b is a subclone of the BCL1 cell line which was derived from the spleen of a tumor bearing (BCL1) BALB/c female mouse.The original tumor arose spontaneously,was monoclonal and bore IgM (landa).The murine tumor resembles a subset of human patients with CLL (chronic lymphocytic leukemia).The in vitro line of this tumor can be activated by LPS to secrete IgM. This property as well as the expression of cell surface IgM and IgD makes BCL1 unique among Bcell tumors. Recently, Thoman and Weigel described the use of this line as a target for BCGF (B cell growth factor). Thus, the BCL1 line can be utilized in studies of two types: a) as a model tumor system, and b) as a clone of B-lymphocytes in studies on the biochemistry of cell surface receptors and mechanisms underlying signaling of B cells to differentiation and replication.
**Culture Medium:** RPMI 1640 + 2mM glutamine + 0.05 mM 2-mercaptoethanol ,85% ; FBS 15%
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Subcultures are prepared by scrping. Dislodge cells in the spent medium, aspirate, add fresh medium and dispense into new flasks.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** TIB-197
**Reference:** Gronowicz ES , et al. An in vitro line of the B cell tumor BCL1 can be activated by LPS to secrete IgM1.J Immunol. 125: 976-980, 1980. Pub Med :6157730
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **2** | **2** | **1** | **7** | **1** | **1** | **5** | **3** | **3** | **1** | **3** |
| **48** | **49** | **54** | **55** | **56** | **57** | **59** | **62** | **63** | **64** | **65** | **66** |

**Viability:** 94% ; 1.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C552
**Designation:** YAC-1
**Species:** Mouse
**Tissue:** Hematopoitic
**Morphology:** lymphoblast

**Description:** YAC-1 is a lymphoma which was induced by inoculation of the Moloney leukemia virus (MLV) into a newborn A /Sn mouse. This cell line is sensitive to the cytotoxic activity of naturally occurring killer cells in mice (NK cells). Therefore, YAC-1 cells are often used as target cells in NK assays.
**Culture Medium:** RPMI 1640 + 2mM L-glutamine adjusted to contain 1.5 g/L sodium bicarbonate, 4.5 g/L glucose, 10 mM HEPES, and 1.0 mM sodium pyruvate, 90%; FBS, 10%.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Cultures can be maintained by addition or replacement of fresh medium.Start cultures at 3 x 10^5 cells/ml and maintain between 2 x 10^5 and 2 x 10^ cells/ml.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** TIB-160
**ECACC Number:** 86022801
**Reference:** J. Natl. Cancer Inst. (Bethesda) 50:347-362, 1973; Eur. J. Immunol. 5: 112-117, 1975.
**Viability:** 92% ; 3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C553
**Designation:** HL 60/MX1
**Species:** Human
**Tissue:** Hematopoitic
**Morphology:** lymphoblast
**Description:** HL 60/MX1 is a mitoxanetrone resistant derivative of the HL-60 cell line (see ATCC CCL-240) which was obtained from peripheral blood leukocytes obtained by leukopheresis from patient with acute promyelocytic leukemia. The cells were selected and subcloned in 1987 for resistance to 39 nM mitoxantrone, an anthracenedione antitumor agent.Subsequent exposure of the HL-60/MX1 cells to higher concentrations of mitoxantrone led to the emergence of cells capable of growth at 190 nM (see ATCC CRL-2257, HL-60/MX2).HL 60/MX1 cells display atypical multidrug resitance (MDR), altered topoisomrrase II catalytic activity and reduced levels of topoisomerase II alpha and beta proteins.HL 60/MX1 cells are crossresistant to etoposide, teniposide, bisantrene. Dactinomycin,4'-(9-acridinylamino)methane- sulfon-m-anisidide,and the anthracyclines daunorubicin and doxorubicin but retain sensitivity to the Vinca alkaloids vincristine and vinblastine, melphalan, mitomycin C and cisplatin.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Cultures can be maintained by addition or replacement of fresh

medium.Start new cultures at 2 x 10 exp5 viable cells/ml and subculture at 1 x 10 exp6 cells/ml.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2258
**Reference:** 23073: Harker WG , et al. Multidrug resistance in mitoxantrone-selected HL-60 leukemia cells in the absence of P-glycoprotein overexpression.Cancer Res. 49:4542-4549, 1989. PubMed: 2568172
**Viability:** 95% ; 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C554
**Designation:** HUV-EC-C
**Species:** Human
**Tissue:** Umbilical vein
**Morphology:** Endothelial-like
**Description:** Human Umbilical Vein Endothelial Cells (HUVEC); neonatal
**Culture Medium:** Endothelial Cell Growth Medium (211-500) ECACC cat**.** This cell line was adapted to Ham's F12+DMEM (1/1V) and FBS10% at NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1730
**ECACC Number:** 06090720
**Reference:** In Vitro Cell. Biol. 26:759 (1990). Cell 53:505 (1988). Blood 81(12):3285 (1993).
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **2** | **2** | **2** | **1** | **8** | **9** | **2** | **4** |
| **38** | **39** | **43** | **44** | **45** | **46** | **47** | **48** |

**Viability:** 92% ; 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C555
**Designation:** MG-63
**Species:** Human
**Tissue:** Bone
**Morphology:** Fibroblast
**Description:** High levels of interferon production can be induced using polyinosinic - polycytidylic acid, cycloheximide and actinomycin D.
**Culture Medium:** MEM (Eagle) with 2 mM L-glutamine and Earle's BSS adjusted to contain 1.5 g/L sodium bicarbonate, 0.1 mM non-essential amino acids, and 1.0 mM sodium pyruvate, 90%; heat-inactivated FBS, 10%**.** MEM has been replaced with DMEM in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** 1. Remove and discard culture medium. 2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor. 3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. 4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. 5. Add appropriate aliquots of the cell suspension to new culture vessels. 6. Incubate cultures at 37°C.
**Isoenzymes:** G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 24 | 6 | 12 | 18 | 15 | 13 | 11,12 | 14 | 12 | 9,12 | 14 | 31,32 | X |

**ATCC Number:** CRL-1427
**ECACC Number:** 86051601
**Reference:** Billiau A , et al. Human interferon: mass production in a newly established cell line, MG-63. Antimicrob. Agents Chemother. 12:11-15, 1977. PubMed: 883813
**Karyology:** 2n=46, This is a hypotriploid human cell line. The model chromosome nuber was 66 occuring in 44% of cells.The rate of cells with higher ploidies was 2.0%. Eighteen to 19 marker chromosomes were common to all cells.
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 2 \| 2 \| 2 \| 7 \| 1 \| 5 \| 1 \| 3 \| 1 \| 1 \| 1 \| 1 |
|---|
| 39\|40\|42\|44\|45\|46\|47\|48\|49\|50\|51\|52\|53\|54 |

**Viability:** 96% ; 2.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C556
**Designation:** PANC-1
**Species:** Human
**Tissue:** Pancreas
**Morphology:** Epithelial
**Description:** Growth is inhibited by 1 unit/ml L-asparaginase. The cells will grow in soft agar.
**Culture Medium:** Dulbecco's modified Eagle's medium with 4 mM L-glutamine adjusted to contain 1.5 g/L sodium bicarbonate and 4.5 g/L glucose, 90%; fetal bovine serum, 10%
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Add fresh culture medium, aspirate and dispense into new culture flasks. Subcultivation ratio: A subcultivation ratio of 1:2 to 1:4 is recommended Medium renewal: 2 to 3 times per week
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 20 | 6,8 | 8 | 15 | 16 | 11,13 | 15 | 14 | 11 | 10 | 12 | 27 | X |

**ATCC Number:** CRL-1469
**ECACC Number:** 87092802
**Reference:** continuous tumor-cell line (panc-1) from a human carcinoma of the exocrine pancreas. Int. J. Cancer 15: 741-747, 1975. PubMed: 1140870
**Karyology:** 2n=46, Chromosome studies indicate a modal number of 63 with 3 distinct marker chromosomes and a small ring chromosome. This is a hypertriploid human cell line. The modal chromosome number was 61, occurring in 32% of cells., However, cells with 63 chromosomes also occurred at a high frequency (22%). The rate of cells with higher ploidies was 8.5%.
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 9 \| 4 \| 7 \| 3 \| 1 \| 2 \| 2 |
|---|
| 58\|61\|62\|63\|69\|73\|85\|97 |

**Viability:** 97%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where

the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C557
**Designation:** PA-TU-8902
**Species:** Human
**Tissue:** Pancreas
**Morphology:** Epithelial
**Description:** Established in 1985 from the primary ductal pancreatic adenocarcinoma (grade II) from a 44-year-old woman; reported as inducing metastasis in nude mice and as secreting proteinases (e.g. urokinase, cathepsin B and D)
**Culture Medium:** 90% Dulbecco's MEM (4.5 g/L glucose) + 10% FBS + 2 mM L-glutamine
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split confluent culture 1:4 to 1:10 every 3-6 days using trypsin/EDTA; seed out at ca. 2-3 x 106 cells/80 cm2
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,11 | 23 | 9 | 8 | 18 | 12,18 | 11,12 | 8,10 | 13 | 11,12 | 9,11 | 15 | 30 | X |

**ECACC Number:** DSMZ no.: ACC 179
**Reference:** Elsasser et al., Virchows Arch B Cell Pathol Incl Mol Pathol 64: 201-207 (1993), PubMed ID 8287116
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 1 \| 1 \| 1 \| 3 \| 1 \| 1 \| 1 \| 1 \| 1 \| 1 \| 3 \| 2 \| 3 \| 1 \| 5 \| 2 |
|---|
| 59\|61\|65\|67\|69\|70\|73\|74\|76\|79\|81\|84\|85\|86\|87\|89\|90\|91 |

**Viability:** 97%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C558
**Designation:** AsPC-1
**Species:** Human
**Tissue:** Pancreas
**Morphology:** Epithelial
**Description:** The line was derived from nude mouse xenografts initiated with cells from the ascites of a patient with cancer of the pancreas.
**Culture Medium:** RPMI 1640 medium with 2 mM L-glutamine adjusted to contain 1.5 g/L sodium bicarbonate, 4.5 g/L glucose, 10 mM HEPES, and 1.0 mM sodium pyruvate, 90%; fetal bovine serum, 10%
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Remove and discard culture medium. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. Add appropriate aliquots of the cell suspension to new culture vessels. Incubate cultures at 37°C..
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11,13 | 24 | 7,10 | 8,10 | 17 | 16 | 13 | 12,13 | 13,15 | 9,12 | 11 | 17 | 27,30 | X |

**ATCC Number:** CRL-1682
**ECACC Number:** 96020930
**Reference:** Chen WH , et al. Human pancreatic adenocarcinoma: in vitro and in vivo morphology of a new tumor line established from ascites. In Vitro 18: 24-34, 1982. PubMed: 7182348
**Karyology:** 2n=46, diploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | |
|---|---|
| **3 \| 2 \| 7 \| 1 \| 1 \| 5 \| 3 \| 1 \| 1 \| 5 \| 3 \| 1 \| 1 \| 2 \| 1 \| 1 \| 1 \| 1** | |
| **53\|54\|55\|56\|57\|58\|62\|63\|64\|65\|66\|67\|68\|92** | |

**Viability:** 94%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C559
**Designation:** AD-293
**Species:** Human
**Tissue:** Embryonic kidney
**Morphology:** Epithelial-like
**Description:** Stratagene recommends preparing and titering AdEasy recombinant virus stocks using the AD-293 cell line [provided with the InterPlay adenoviral TAP system and available separately (Catalog #240085)]. AD-293 cells are derived from the commonly used HEK293 cell line, but have improved cell adherence and plaque formation properties. HEK293 cells are human embryonic kidney cells transformed by sheared adenovirus type 5 DNA.16 AD-293 cells, like HEK293 cells, produce the adenovirus E1 gene in trans, allowing the production of infectious virus particles when cells are transfected with E1-deleted adenovirus vectors such as the pAdEasy-1 vector. Standard HEK293 cells do not adhere well to tissue culture dishes, hindering adherent cell culture and plaque assay procedures. AD-293 cells demonstrate improved adherence to tissue culture dishes, making AD-293 cell monolayers less susceptible to disruption. Note Despite the improved adherence of AD-293 cells, it is important to minimize monolayer disruption during passaging and plaque assays by gently pipeting liquids down the side of the culture dish instead of pipetting directly onto the cells.
**Culture Medium:** DMEM(containing 4.5 g/L glucose and 110 mg/L sodium pyruvate and 4 mM L-glutamine), supplemented with 10% (v/v) heat-inactivated FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** 1. Remove the growth medium by aspiration. Wash cells once with 10 ml of phosphate-buffered saline. 2. Trypsinize cells for 1–3 minutes in 1.5-ml of Trypsin-EDTA Solution. 3. Dilute the cells with 8.5 ml of growth medium to inactivate the trypsin. 4. Transfer 1 ml of the cell suspension to a fresh 75-cm2 tissue culture flask and add 9 ml fresh growth medium. Place the cells in a 37°C incubator at 5% CO2. Monitor cell density daily.
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Acta Biochimica Polonica 53(3), 2006, 525-530.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2** | **1** | **2** | **1** | **3** | **2** | **1** | **2** | **1** | **1** | **6** | **1** | **1** | **2** | **1** | **1** | **1** | **1** | | | | | | | |
| **42** | **43** | **44** | **45** | **46** | **48** | **49** | **50** | **51** | **52** | **53** | **57** | **58** | **60** | **61** | **64** | **69** | **70** | | | | | | | |

**Viability:** 93%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C560
**Designation:** GP-293
**Species:** Human
**Tissue:** Embryonic kidney
**Morphology:** Epithelial
**Description:** Packaging Cell Line
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 to 1:3, ie seeding at 3-5 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C. Cells may take up to 7 days to attach after resucitation and subculture. .
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** 1. Burns, J. C., et al. (1993) Proc. Natl. Acad. Sci. USA 90:8033–8037. 2. Emi, N., et al. (1991) J. Virol. 65:1202–1207.
**Viability:** 97%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C561
**Designation:** BEAS-2B
**Species:** Human
**Tissue:** Bronchus
**Morphology:** Epithelial
**Description:** Epithelial cells were isolated from normal human bronchial epithelium obtained from autopsy of non-cancerous individuals. [21937] The cells were infected with an adenovirus 12-SV40 virus hybrid (Ad12SV40) and cloned. [21937] The cells retain the ability to undergo squamous differentiation in response to serum, and can be used to screen chemical and biological agents for ability to induce or affect differentiation and/or carcinogenesis. [21937] The cells stain positively for keratins and SV40 T antigen.
**Culture Medium:** LHC-9 medium with 0.5 ng/ml recombinant epidermal growth factor (EGF), 500 ng/ml hydrocortisone, 0.005 mg/ml insulin, 0.035 mg/ml bovine pituitary extract, 500 nM ethanolamine, 500 nM phosphoethanolamine, 0.01 mg/ml transferrin, 6.5 ng/ml 3,3',5-triiodothyronine, 500 ng/ml epinephrine, 0.1 ng/ml retinoic acid and trace elements (See references). LHC-9 basal medium is available from Biofluids, Inc., Rockville, MD (catalog No. 118) and from Clonetics Corporation, Walkersville, MD 21793 (BEBM; CC3171). Modified LHC-9 growth medium with additives is available from Clonetics Corporation, Walkersville, MD 21793 (BEGM Bullet Kit; CC3170). Note: ATCC does not use gentamycin-

amphotericin B. Do not filter the EGF.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Remove and discard culture medium. Add 2.0 to 3.0 ml of 0.25% Trypsin - 0.53mM EDTA solution containing 0.5% % polyvinylpyrrolidone (PVP) to flask and observe cells under an inverted microscope until cell layer is dispersed (usually with 5 to 10 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37C to facilitate dispersal. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. Transfer cell suspension to centrifuge tube and spin at approximately 125 x g for 5 to 10 minutes. Discard supernatant and resuspend cells in fresh growth medium. Inoculate new flasks at 1500 to 3000 cells per sq. cm. The culture flasks used should be pre-coated with a mixture of 0.01mg/ml fibronectin, 0.03 mg/ml bovine collagen type I and 0.01mg/ml bovine serum albumin dissolved in LHC-9 medium (see reference below). Place culture flasks in incubators at 37C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-9609
**ECACC Number:** 95102433
**Reference:** Reddel RR , et al. Immortalized human bronchial epitherial mesothelial cell lines. US Patent 4,885,238 dated Dec 5 1989
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **1** | **1** | **2** | **3** | **16** | **4** | **2** | **1** |
| **42** | **43** | **44** | **45** | **46** | **47** | **50** | **51** |

**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C562
**Designation:** SK-MES-1
**Species:** Human
**Tissue:** Lung
**Morphology:** Epithelial
**Description:** Derived after co-cultivation from a pleural effusion of a patient with squamous cell carcinoma.
**Culture Medium:** Ham's F10 : DMEM (1:1) + 2mM Glutamine + 10% FBS .
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:2 i.e seeding at 4-5 x 10^4 cells/cm^2 Using

0.25% trypsin or trypsin/EDTA ; 5%CO2;37 C
**Isoenzymes:** LDH
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 91091804
**Reference:** Human Tumor Cells In Vitro 1975 ; pp 115 ; Plenum Press, NY; J Nat Cancer 1977;58:209
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **2** | **1** | **1** | **2** | **2** | **4** | **6** | **7** | **2** | **2** | **1** |
| **46** | **48** | **50** | **52** | **53** | **56** | **58** | **59** | **61** | **63** | **80** |

**Viability:** 94% ; 1.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C563
**Designation:** THP-1
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Monocyte
**Description:** These cells were derived from the peripheral blood of a 1-year-old male with acute monocytic leukemia.THP-1 cells have FC and C3b receptors and lack surface and cytoplasmic immunoglobulins. These cells also stain positive for alpha-naphthyl butyrate esterase, produce lysozymes and are phagocytic (both latex beads and sensitized erythrocytes). THP-1 cell can also restore the response of purified T- lymphocytes to Con A, show increased CO2 production on phagocytosis and can be differentiated into macrophage-like cells.
**Culture Medium:** RPMI 1640 + 2mM L-glutamine adjusted to contain 1.5 g/L sodium bicarbonate, 4.5 g/L glucose, 10 mM HEPES and 1.0 mM sodium pyruvate and supplemented with 0.05 mM 2-mercaptoethanol, 90%; FBS, 10%
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 2-4 x 10^4 viable cells/ml. Subculture when cell concentration reaches 8 x 10^5 cells/ml. Do not allow the cell concentration to exceed 1 x 10^6 cells/ml.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 23 | 7,8 | 11 | 17,18 | 15 | 12 | 10,12 | 15 | 11,14 | 8,12 | 11 | 27,33 | X |

**ATCC Number:** TIB-202
**ECACC Number:** 88081201
**Reference:** Tsuchiya S , et al. Induction of maturation in cultured human monocytic leukemia cells by a phorbol diester. Cancer Res. 42: 1530-1536, 1982. PubMed: 6949641
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|10\| 2 \| 5 \| 5 \| 1 \| 3 \| 3 |
|---|
| 41\|46\|47\|48\|49\|50\|51\|52 |

**Viability:** 95% ; 2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C564
**Designation:** FR-E
**Species:** Human
**Tissue:** Lung
**Morphology:** Fibroblast-like
**Description:** The FR-E adenocarcinoma cell line was from a pericardial effusion from a patient trated with radiation.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C,
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Cole,S.P.C., Campling,B.G., Dexter, D.F.,Holden.J. J. and Roder , J. C.
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C565
**Designation:** QU-DB
**Species:** Human
**Tissue:** Lung
**Morphology:** Fibroblast-like
**Description:** The QU-DB is large cell carcinoma cell line.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C,
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Cole,S.P.C., Campling,B.G., Dexter, D.F.,Holden.J. J. and Roder , J. C. Establishment of a human large cell lung tumor line (QU_DB) with metastatic properties in athymic mice. Cancer (Phila.), 58: 917-923, 1986.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 3 \| 6 \| 5 \| 5 \| 4 \| 4 \| 1 |
|---|
| 45\|46\|48\|50\|51\|53\|58\|63 |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C566
**Designation:** SKLC6
**Species:** Human
**Tissue:** Lung
**Morphology:** Fibroblast-like
**Description:** SKLC6 cells were transfected with pIRES2-EGFP/BORIS.Non small cell lung cancer.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**Reference:** Cancer Research 65,7763-7774,September 1,2005
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **5** | **1** | **4** | **3** | **1** | **1** | **2** | **2** | **1** | **2** | **1** | **1** | **1** | **3** |
| **45** | **46** | **47** | **48** | **49** | **50** | **51** | **52** | **53** | **54** | **55** | **56** | **59** | **60** | **61** | **62** |

**Viability:** 97%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C567
**Designation:** BH-E
**Species:** Human
**Tissue:** Lung
**Morphology:** Fibroblast-like
**Description:** The BH-E adenocarcinoma cell line was from a pleural effusion from a patient treated with chemotheray.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 1-3 x 10^4 cells/cm^2 using 0.25% trypsin/EDTA, 5% CO2, 37`C,
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 21,22 | 8 | 9,11 | 15,16 | 18 | 11 | 7,10 | 13,15 | 11,12 | 9 | 16,17 | 30 | X,Y |

**Reference:** Cole,S.P.C., Campling,B.G., Dexter, D.F.,Holden.J. J. and Roder , J. C.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C568
**Designation:** LS 174T
**Species:** Human
**Tissue:** Colon
**Morphology:** Epithelial
**Description:** LS 174T is a variant of LS 180 (ATCC CL-187) that has been maintained by using trypsin in the subculture protocol. It is more easily subcultivated than that parent line and, like LS 180, it is reported to produce large amounts of carcinoembryonic antigen (CEA). Electron microscopic studies revealed abundant microvilli and intracytoplasmic mucin vacuoles [Pubmed ID: 1262041]. They are negative for p53 antigen expression, but positive for mRNA expression. LS 174T cells stain positively for cytokeratins. The line is positive for expression of c-myc, N-myc, H-ras, N-ras. Myb, and fos oncogenes. K-ras and sis oncogene expression were not detected.
**Culture Medium:** Minimum essential medium (Eagle) with 2 mM L-glutamine and Earle's BSS adjusted to contain 1.5 g/L sodium bicarbonate, 0.1 mM non-essential amino acids, and 1.0 mM sodium pyruvate, 90%; fetal bovine serum, 10%**.** MEM has been replaced with DMEM in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Remove and discard culture medium. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. Add appropriate aliquots of the cell suspension to new culture vessels. Incubate cultures at 37°C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CL-188
**Reference:** Tom BH , et al. Human colonic adenocarcinoma cells. I. Establishment and description of a new line. In Vitro 12: 180-191, 1976. PubMed: 1262041
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **1 \| 2 \| 1 \| 2 \| 2 \| 1 \| 2 \| 3 \| 3 \| 6 \| 7** |
|---|
| **35\|36\|37\|38\|39\|41\|42\|43\|44\|45\|46** |

**Viability:** 91%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C569
**Designation:** TC-1[JHU-1]
**Species:** Mouse
**Tissue:** Lung
**Morphology:** Epithelial
**Description:** The tumor cell line, TC-1 [tissue culture number one], was derived from primary lung epithelial cells of C57BL/6 mice. The cells were immortalized with the amphotropic retrovirus vector LXSN16E6E7 and subsequently transformed with the pVEJB plasmid expressing the activated human c-Ha-ras oncogene [PubMed: 8548765]. The transformed cells were selected with G418 and Hygromycin B [PubMed: 8548765]. The cells are positive for the expression of HPV-16 E7 [PubMed: 8548765]. The TC-1 lung metastasis model can be used to test the efficacy of various E6/E7-specific vaccines and immunotherapeutic strategies [PubMed: 9724092].
**Culture Medium:** RPMI 1640 medium with 2 mM L-glutamine adjusted to contain 1.5 g/L sodium bicarbonate, 4.5 g/L glucose, 10 mM HEPES, 1.0 mM sodium pyruvate supplemented with 0.1 mM nonessential amino acids, 90%; fetal bovine serum, 10% Temperature: 37.0C
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** 1. Remove and discard culture medium. 2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor. 3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. 4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. 5. Add appropriate aliquots of the cell suspension to new culture vessels. Cultures can be established between 1 X 10(5) and 2 X 10(5) viable cells/cm2. Maintain cultures at a cell concentration between 2 X 10(5) and 4 X 10(5) viable cells/cm2. Do not exceed 6 X 10(5) cells/cm2. . 6. Incubate cultures at 37°C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2785
**Reference:** Lin KY , et al. Treatment of established tumors with a novel vaccine that enhances major histocompatibility class II presentation of tumor antigen. Cancer Res. 56: 21-26, 1996. PubMed: 8548765
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **2** | **1** | **2** | **4** | **2** | **2** | **4** | **3** | **4** | **1** | **1** | **2** | **1** |
| **52** | **61** | **63** | **64** | **65** | **67** | **68** | **69** | **70** | **71** | **72** | **74** | **75** | **80** |

**Viability:** 97%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C570
**Designation:** HCT-116
**Species:** Human
**Tissue:** Colon
**Morphology:** Epithelial
**Description:** The cells are positive for keratin by immunoperoxidase staining. HCT 116 cells are positive for transforming growth factor beta 1 (TGF beta 1) and beta 2 (TGF beta 2) expression. This line has a mutation in codon 13 of the ras protooncogene, and can be used as a positive control for PCR assays of mutation in this codon.
**Culture Medium:** The base medium for this cell line is ATCC-formulated McCoy's 5a Medium Modified, Catalog No. 30-2007. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%. This cell was adapted to DMEM + FBS10% at NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** 1. Remove and discard culture medium. 2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum which contains trypsin inhibitor. 3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. 4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. 5. Add appropriate aliquots of the cell suspension to new culture vessels. 6. Incubate cultures at 37°C.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-247
**ECACC Number:** 91091005
**Reference:** Schroy PC , et al. Detection of p21ras mutations in colorectal adenomas and carcinomas by enzyme-linked immunosorbent assay. Cancer 76: 201-209, 1995. PubMed: 8625092
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **3** | **1** | **1** | **3** | **3** | **7** | **10** | **2** |
| **38** | **39** | **40** | **43** | **44** | **45** | **46** | **47** |

**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C571
**Designation:** SW 1353
**Species:** Human
**Tissue:** Bone
**Morphology:** Fibroblast
**Description:** The SW 1353 cell line was initiated by A. Leibovitz at the Scott and White Clinic, Temple, Texas in 1977 from a primary grade II chondrosarcoma of the right humerus obtained from a 72 year old female Caucasian. The initial culture medium was L-15 containing cortisone and insulin plus 10% fetal bovine serum and antibiotics. A frozen ampule at passage 12 was received at the ATCC in January, 1982
**Culture Medium:** The base medium for this cell line is ATCC-formulated Leibovitz's L-15 Medium, Catalog No. 30-2008. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Remove medium, and rinse with 0.25% trypsin, 0.03% EDTA solution. Remove the solution and add an additional 1 to 2 ml of trypsin-EDTA solution. Allow the flask to sit at room temperature (or at 37C) until the cells detach. Add fresh culture medium, aspirate and dispense into new culture flasks.
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** HTB-94
**Reference:** Lin KY, et al.Treatment of established tumors with a novel vaccine that enhances major histocompatibility class II presentation of tumor antigen.Cancer Res.56:21-26,1996.pub Med:8548765
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **1 \| 2 \| 6 \| 7 \|10\| 4** |
|---|
| **42\|43\|45\|46\|47\|49** |

**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C572
**Designation:** Hela-S3
**Species:** Human
**Tissue:** Cervix
**Morphology:** Epithelial
**Description:** HeLa S3 is a clonal derivative of the parent HeLa line (see ATCC CCL-2). S3 was cloned in 1955 by T.T. Puck, P.I. Marcus, and S.J. Cieciura. [22814] The HeLa S3 clone has been very useful in the clonal analysis of mammalian cell populations relating to chromosomal variation, cell nutrition, and plaque-forming ability. This line can be adapted to grow in suspension. [25952] The cells are positive for keratin by immunoperoxidase staining. A culture at approximately passage 400 was submitted to the American Type Culture Collection in February, 1972. HeLa cells have been reported to contain human papilloma virus 18 (HPV-18) sequences. [23180]
**Culture Medium:** The base medium for this cell line is ATCC-formulated F-12K Medium, Catalog No. 30-2004. Add the following fetal bovine serum to a final concentration of 10%. F-12K has been replaced with F-12 in NCBI.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** split confluent culture 1:5 to 1:8 every 5-7 days (cells grow slowly) using trypsin/EDTA; seed out at ca. 2-3 x 106 cells/80 cm2
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-2.2
**ECACC Number:** DSMZ no.: ACC 161
**Reference:** Chen TR . Re-evaluation of HeLa, HeLa S3, and HEp-2 karyotypes. Cytogenet. Cell Genet. 48: 19-24, 1988. PubMed: 3180844
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **3** | **1** | **1** | **2** | **1** | **4** | **5** | **3** | **3** | **1** | **1** | **1** | **1** | **1** |
| **51** | **52** | **57** | **58** | **60** | **62** | **63** | **64** | **65** | **66** | **67** | **68** | **71** | **72** | **77** | **78** |

**Viability:** 91%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C573
**Designation:** WCH-17
**Species:** Mouse
**Tissue:** Liver
**Morphology:** Epithelial
**Description:** WCH-17 are useful for biological assays of woodchuck interferon, and can be used to propagate HVM.
**Culture Medium:** Dulbecco's modified Eagle's medium, 90%; fetal bovine serum, 10%
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Remove spent medium, add fresh 0.25% trypsin, 0.03% EDTA solution, rinse and remove trypsin. Let the culture sit at room temperature (or at 37C) for 2 to 5 minutes. Add fresh medium, aspirate and dispense into new flasks
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2082
**Reference:** Schechter EM , et al. Characterization of a herpesvirus isolated from woodchuck hepatocytes. J. Gen. Virol. 69: 1591-1599, 1988. PubMed: 2839596
**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C574
**Designation:** KCL-22
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** round, single cells in suspension, sometimes in small clusters
**Description:** established from the pleural effusion of a 32-year-old woman with Philadelphia chromosome-positive CML in blast crisis in 1981; described to contain the t(9;22) b2-a2 fusion gene and a p53 mutation.
**Culture Medium:** 90% RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:5 to 1:10 every 2-3 days; seed out at ca. 0.5 x $10^6$ cells/ml; maintain at ca. 0.2-0.5 x $10^6$ cells/ml; maximal density of ca. 2.0 x $10^6$ cells/ml. at 37 °C with 5% $CO_2$ . cell harvest of about 1.0-1.5 x $10^6$ cells/ml.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** DSMZ no.: ACC 519
**Reference:** Gann 74: 319-322 (1983), Int J Cell Cloning 1: 105-117 (1983), Leuk Res 23: 207-225 (1999) **Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 1 \| 2 \| 2 \| 4 \| 2 \| 2 \| 2 \| 2 \| 2 \| 1 \| 1 \| 2 \| 2 \| 1 \| 1 \| 1 |
|---|
| 45\|46\|47\|48\|49\|50\|51\|52\|56\|57\|58\|59\|61\|64\|65\|66\|67 |

**Viability:** 94%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C575
**Designation:** C6
**Species:** Rat
**Tissue:** Brain
**Morphology:** Fibroblast-LIKE
**Description:** The glial cell strain, C6, was cloned from a rat glial tumor induced by N-nitrosomethylurea by Benda et al. after a series of alternate culture and animal passages [PubMed: 4873531]. S-100 production increases ten fold as cells grow from low density to confluency.
**Culture Medium:** F-12K Medium, Catalog No. 30-2004. Fetal bovine serum to a final concentration of 2.5%; horse serum to a final concentration of 15%. F-12K has been replaced with F-12 in NCBI.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** 1. Remove and discard culture medium. 2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin - 0.53 mM EDTA solution to remove all traces of serum which contains trypsin inhibitor. 3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37C to facilitate dispersal. 4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. 5. Add appropriate aliquots of the cell suspension to new culture vessels. 6. Incubate cultures at 37C.
**Isoenzymes:** LDH,G6PD, NP
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-107
**ECACC Number:** 92090409
**Reference:** Chen Y , et al. Demonstration of binding of dengue virus envelope protein to target cells. J. Virol. 70: 8765-8772, 1996. PubMed: 8971005
**Karyology:** 2n=42
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 4 \|16\| 4 \| 1 \| 1 \| '1' \| '1' |
|---|

| 39\|40\|42\|43\|74\|89\|123\|144 |
|---|

**Viability:** 95%.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C576
**Designation:** CHO DG-44
**Species:** Chinese hamster
**Tissue:** Ovary
**Morphology:** Epithelial-like
**Description:** Dihydrofolate reductase-deficient CHO cells,for expression of reccombinant proteins in suspension culture.
**Culture Medium:** DMEM + 2mM Glutamine + 0.1mM Hypoxanthine + 0.01 mM Thymidine + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split sub-confluent cultures (70-80%) 1:4 to 1:6 ie seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsinal/EDTA ; 5% CO2 ; 37 C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** In Vitro Cell Dev Biol-Animal April 1999, 35:178-182.
**Karyology:** 2n=22
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 5 \| 8 \| 8 \| 9 |
|---|
| 19\|20\|21\|22 |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C577
**Designation:** BE(2)-C
**Species:** Human

**Tissue:** Brain
**Morphology:** Neuroblast
**Description:** BE(2)-C is a clone of the SK-N-BE(2) neuroblastoma cell line (see ATCC CRL-2271) that was established in November of 1972 from a bone marrow biopsy taken from child with disseminated neuroblastoma after repeated courses of chemotherapy and radiotherapy. BE(2)-C cells have a reported saturation density of greater than 5 X 10 exp5 cells/sq cm. The cells grow as clusters of flattened neuroblastic cells with occasional fine cell processes (neurites).
**Culture Medium:** 1:1 mixture Eagle's Minimum Essential Medium, Catalog No. 30-2003, and F12 Medium. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%. EMEM has been replaced with DMEM in NCBI.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** 1. Remove and discard culture medium. 2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum which contains trypsin inhibitor. 3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. 4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. 5. Add appropriate aliquots of the cell suspension to new culture vessels. 6. Incubate cultures at 37°C..
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2268
**Reference:** Benda P , et al. Differentiated rat glial cell strain in tissue culture. Science 161: 370-371, 1968. PubMed: 4873531
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **4** | **3** | **5** | **1** | **2** | **1** | **2** | **1** | **1** | **1** | **1** | **2** | **2** | **1** | **1** | **1** | **1** |
| **37** | **38** | **39** | **40** | **41** | **42** | **45** | **48** | **57** | **59** | **65** | **68** | **69** | **71** | **72** | **74** | **75** |

**Viability:** 93%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C578
**Designation:** MDA-MB-231

**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial
**Description:** The cells express the WNT7B oncogene [PubMed: 8168088].
**Culture Medium:** The base medium for this cell line is ATCC-formulated Leibovitz's L-15 Medium add fetal bovine serum to a final concentration of 10%. The cell line was adapted to RPMI + 10% FBS in NCBI.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** The cells express the WNT7B oncogene [PubMed: 8168088].
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** HTB-26
**ECACC Number:** 92020424
**Reference:** Brinkley BR , et al. Variations in cell form and cytoskeleton in human breast carcinoma cells in vitro. Cancer Res. 40: 3118-3129, 1980. PubMed: 7000337
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3** | **3** | **9** | **1** | **3** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** |
| **42** | **45** | **46** | **47** | **48** | **51** | **52** | **53** | **55** | **58** | **60** | **62** | **65** | **68** | **73** | **81** |

**Viability:** 94%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C579
**Designation:** P3U1
**Species:** Mouse
**Tissue:** Skin
**Morphology:** Lymphoblast
**Description:** Derivative 0f P3X63Ag8,known as the Kearney line,the cell line is non secretor.HGPRT-and HAT sensitive.It is useful for fusion with spleen cells to produce hybridomas or for hybridisation studies with other myelomas or lymphomas.
**Culture Medium:** RPMI 1640 + 2mM glutamine + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** maintain cultures between 3-9 x 10000 cells /ml;5% CO2,37 C.Rapid cell death occurs when cell concentration exceeds 1,000,000 cells/ml.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 85011417

**Reference:** J Exp Med 1979;150:580;Curr Top Microbial Immunol 1978;81:1
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \| 2 \| 1 \| 3 \| 3 \| 3 \| 4 \| 4 \| 5 \| 2 \| 2 |
|---|
| 37\|38\|41\|43\|44\|45\|48\|50\|52\|53\|57 |

**Viability:** 92%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C580
**Designation:** CIRC-HLF
**Species:** Human
**Tissue:** Lung
**Morphology:** Fibroblast-like
**Description:** The primary cells are derived from lung biopsy of a diabetic lady with no other known diseases.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Remove medium, and rinse with 0.25% trypsin, 0.03% EDTA solution. Remove the solution and add an additional 1 to 2 ml of trypsin-EDTA solution. Allow the flask to sit at room temperature (or at 37C) until the cells detach. Add fresh culture medium, aspirate and dispense into new culture flasks.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 3 \| 2 \|11\| 2 \| 3 \| 1 \| 1 \| 2 \| 1 \| 1 \| 1 |
|---|
| 43\|44\|45\|46\|47\|48\|49\|50\|51\|52\|53\|60 |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C581
**Designation:** CIRC-HLF-CI
**Species:** Human
**Tissue:** Lung
**Morphology:** Fibroblast
**Description:** The primery cells are derived from lung biopsy of a victim of chemical weapons who sustained injury 23 years ago.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Remove medium, and rinse with 0.25% trypsin, 0.03% EDTA solution. Remove the solution and add an additional 1 to 2 ml of trypsin-EDTA solution. Allow the flask to sit at room temperature (or at 37C) until the cells detach. Add fresh culture medium, aspirate and dispense into new culture flasks.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **4** | **2** | **8** | **1** | **2** | **2** | **1** | **2** | **4** | **1** | **1** | **1** |
| **43** | **44** | **45** | **46** | **47** | **48** | **49** | **50** | **51** | **52** | **58** | **61** | **68** |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C582
**Designation:** CLL-CII
**Species:** Human
**Tissue:** Hematopoitic
**Morphology:** Lymphoblast-like
**Description:** Chronic lymphocytic leukemia
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 2-4 x 10^4 viable cells/ml.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 93%

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C583
**Designation:** CLL-PGA
**Species:** Human
**Tissue:** Hematopoitic
**Morphology:** Lymphoblast-like
**Description:** Chronic lymphocytic leukemia**.**
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 2-4 x 10^4 viable cells/ml.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 92%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C584
**Designation:** KYSE-30
**Species:** Human
**Tissue:** Esophageal
**Morphology:** Epithelial
**Description:** derived from well differentiated invasive esophageal squamous cell carcinoma resected from middle intra-thoracic esophagus of a 64-year-old Japanese man prior to treatment; cell line established from tumor cells heterotransplanted into athymic mice; described to be heterotransplantable in athymic mice and to carry p53 mutation and amplification of cERB B, MYC and CYCLIN D1
**Culture Medium:** 45% RPMI 1640 + 45% Ham's F12 + 10% FBS
**Preservation Medium:** 70% medium, 20% FBS, 10% DMSO
**Subculture Routine:** split confluent culture 1:3 to 1:10 every 2-6 days using trypsin/EDTA; seed out at ca. 1-4 x 106 cells/175 cm2.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**ATCC Number:** ACC 351
**ECACC Number:** 94072011
**Reference:** Shimada et al., Cancer 69: 277-284 (1992), PubMed ID 1728357 Shimada et al., Br J Surg 80: 605-607 (1993), PubMed ID 8518899
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **6** | **2** | **3** | **1** | **1** | **1** | **1** | **1** | **3** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** |
| **36** | **39** | **41** | **44** | **45** | **46** | **47** | **48** | **49** | **50** | **51** | **52** | **53** | **60** | **64** | **65** | **69** | **70** | **72** | **73** |

**Viability:** 85%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C585
**Designation:** H9c2(2-1)
**Species:** Rat
**Tissue:** Myocardium
**Morphology:** Myoblast
**Description:** H9c2(2-1) is a subclone of the original clonal cell line derived from embryonic BD1X rat heart tissue by B. Kimes and B. Brandt and exhibits many of the properties of skeletal muscle. Myoblastic cells in this line will fuse to form multinucleated myotubes and respond to acetylcholine stimulation. Fusion occurs faster if the serum concentration in the medium is reduced to one percent. **Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** A subcultivation ratio of 1:2 to 1:4 is recommended.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1446
**ECACC Number:** 88092904
**Reference:** 1062: Kimes BW, Brandt BL. Properties of a clonal muscle cell line from rat heart. Exp. Cell Res. 98: 367-381, 1976. PubMed: 943302
**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C586
**Designation:** UMR-106
**Species:** Rat
**Tissue:** Bone
**Morphology:** Epithelial
**Description:** The UMR-106 cell line is a clonal derivative of a transplantable rat osteosarcoma that had been induced by injection of radiophosphorous (32P). The cells are responsive to PTH, prostaglandins and bone resorbing steroids. The PTH responsiveness of UMR-106 is greater than that of the related cell line UMR-108 (ATCC CRL-1663). Activation of protein kinase C inhibits ATP induced increases in intracellular calcium levels. Both the original sarcoma and the cloned line were developed by T.J. Martin at the University of Sheffield. The cells are responsive to PTH, prostaglandins and bone resorbing steroids. The PTH responsiveness of UMR-106 is greater than that of the related cell line UMR-108 (ATCC CRL-1663). Activation of protein kinase C inhibits ATP induced increases in intracellular calcium levels. Both the original sarcoma and the cloned line were developed by T.J. Martin at the University of Sheffield.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 5%DMSO
**Subculture Routine:** A subcultivation ratio of 1:4 to 1:8 is recommended
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1661
**ECACC Number:** 90111314
**Reference:** 21441: Banerjee C, et al. An AML-1 consensus sequence binds an osteoblast-specific complex and transcriptionally activates the osteoclacin gene. Proc. Natl. Acad. Sci. USA 93: 4968-4973, 1996. PubMed: 8643513
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C587
**Designation:** LL/2 (LLc1)
**Species:** Mouse
**Tissue:** Lung
**Morphology:** Lymphoblast-like- loosely attached or floating
**Description:** This line is widely used as a model for metastasis and is useful for studying the mechanisms of cancer chemotherapeutic agents. Lewis lung carcinoma is a cell line established from the lung of a C57BL mouse bearing a tumor resulting from an implantation of primary Lewis lung carcinoma. The cells are resistant to 1,3-bis-(2-chloroethyl)-1-nitrosourea, but are

sensitive to methotrexate. The cells are reported to be highly tumorigenic, but weakly metastatic in mice. The cells form multilayers in flasks without actually becoming confluent. Tested and found negative for ectromelia virus (mousepox). Lewis lung carcinoma is a cell line established from the lung of a C57BL mouse bearing a tumor resulting from an implantation of primary Lewis lung carcinoma. [1091] The cells are resistant to 1,3-bis-(2-chloroethyl)-1-nitrosourea, but are sensitive to methotrexate. [1091] The cells are reported to be highly tumorigenic, but weakly metastatic in mice. The cells form multilayers in flasks without actually becoming confluent. Tested and found negative for ectromelia virus (mousepox).
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** A subcultivation ratio of 1:4 to 1:6 is recommended
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1642
**ECACC Number:** 90020104
**Reference:** Bertram JS, Janik P. Establishment of a cloned line of Lewis lung carcinoma cells adapted to cell culture. Cancer Lett. 11: 63-73, 1980. PubMed: 7226139
**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C588
**Designation:** MC/9
**Species:** Mouse
**Tissue:** Liver
**Morphology:** Lymphoblast
**Description:** This is cloned mast cell line derived from mouse fetal liver. The cells can be sensitized to specific antigens by incubating them with IgE having the desired antigenic specificity. The cells so coated will release soluble mediators (such as histamine) in response to exposure to the antigen (allergen). The cells can be sensitized to specific antigens by incubating them with IgE having the desired antigenic specificity. The cells so coated will release soluble mediators (such as histamine) in response to exposure to the antigen (allergen).
**Culture Medium:** DMEM with 4mM L-glutamine adjusted to contain 4.5 g/L glucose and 1.5 g/L sodium bicarbonate and supplemented with 2 mM L-glutamine, 0.05 mM 2-mercaptoethanol, 10% Rat T-STIM and 10% FBS.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 2 to 5 X 10 exp5 viable cells/ml. Maintain cell density between 2 X 10 exp5 and 2 X 10 exp6 viable cells/ml. Do not allow the cell density to exceed 2 X 10 exp6 cells/ml.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-8306
**Reference:** Cantor HI, Nabel G. Assay methods and systems utilizing mast cell clones. US Patent 4,559,310 dated Dec 17 198
**Karyology:** 2n=40
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **1** | **6** | **1** | **3** | **2** | **2** | **8** | **1** | **5** | **1** |
| **29** | **30** | **31** | **32** | **33** | **35** | **36** | **37** | **38** | **39** |

**Viability:** 92%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C589
**Designation:** 293/KDR
**Species:** Human
**Tissue:** Kidney
**Morphology:** Epithelial
**Description:** Derivatives of HEK293 human embryonic kidney cells.
**Culture Medium:** DMEM + 10%FBS + 2 mM of L-glutamin
**Preservation Medium:** 70% medium, 20% FBS, 10% DMSO
**Subculture Routine:** A subcultivation ratio of 1:5 to 1:10 is recommended
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative..
**Reference:** Sibtech,Inc.,Newington,Connecticut 06111.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C590
**Designation:** CHO/dhFr-
**Species:** Chinese hamster
**Tissue:** Ovary

**Morphology:** Epithelial
**Description:** The cells are deficient in dihydrofolate reductase.They should die in the absence of HT ( Hypoxanthine-Thymidine). Methotrexate (Amethopterin) is added to the cell culture medium to prevent growth of revertant cells with a low resistance to the drug.
**Culture Medium:** DMEM with 4 mM L-glutamine adjusted to contain 1.5 g/L sodium bicarbonate and supplemented with 0.1 mM hypoxanthine, 0.016 mM thymidine, 0.002mM Methotrexate (Amethopterin) and 10% FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** A subcultivation ratio of 1:4 to 1:8 is recommended
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-9096
**ECACC Number:** 94060607.
**Reference:** Shulman T, et al. An antibody reactive with domain 4 of the platelet-derived growth factor beta receptor allows BB binding while inhibiting proliferation by impairing receptor dimerization. J. Biol. Chem. 272: 17400-17404, 1997. PubMed: 9211881
**Viability:** 92%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C591
**Designation:** T/G HA VSMC
**Species:** Human
**Tissue:** Aorta
**Morphology:** Fibroblast
**Description:** This cell line was established from the normal aorta of an 11 month old child.This is a normal human cell line with a 46,XX karyotype. The modal chromosome number was 46, occurring in 90% of cells. The rate of polyploid cells was 0.8%. No structurally altered chromosomes were detected in 15 metaphases karyotyped. Both X chromosomes appeared normal.
**Culture Medium:** F-12K with 0.05 mg/ml ascorbic acid; 0.01 mg/ml insulin; 0.01 mg/ml transferrin; 10 ng/ml sodium selenite; 0.03 mg/ml Endothelial Cell Growth Supplement (ECGS); FBS 10%, HEPES to a final concentration of 10 mM, TES to a final concentration of 10 mM. F-12K has been replaced with F-12 in NCBI.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** A subcultivation ratio of 1:2 to 1:3 is recommended
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1999
**Reference:** Virchows Arch (2009) 455:171–185
**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide

sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C592
**Designation:** LMH
**Species:** Chicken
**Tissue:** Liver
**Morphology:** Epithelial
**Description:** LMH is a primary hepatocellular carcinoma epithelial cell line established in 1981 by Tomoyuki Kitagawa at the Cancer Institute, Kami-Ikebukuro, Toshima-ku, Tokyo, Japan. Tumorous nodules were induced in the liver of a male leghorn chicken by long term treatment with diethylnitrosamine. The morphology of the cells is dendritic like. The cells express glucose-6-phosphatase and weak canalicular ATPase activity. The cells form tumors in athymic nude mice. LMH cells contain a low level of functional estrogen receptor and are inducible for the expression of the liver specific apolipoprotein II (apoII) gene. The cell line is useful for transfection studies.
**Culture Medium:** Waymouth's MB 752/1 medium, 90%; FBS, 10%
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** A subcultivation ratio of 1:4 is recommended
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2117
**Reference:** Binder R, et al. Expression of endogenous and transfected apolipoprotein II and vitellogenin II genes in an estrogen responsive chicken liver cell line. Mol. Endocrinol. 4: 201-208, 1990. PubMed: 2330000
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C593
**Designation:** F25
**Species:** Cat
**Tissue:** Bone marrow
**Morphology:** Fibroblast
**Description:** This cell line was derived from the erythroblasts that metastased to thymus of a 1.5 years old female cat (Felis catus).

**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** A subcultivation ratio of 1:2 is recommended
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-6566
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C594
**Designation:** RMA-HHD
**Species:** Mouse
**Tissue:** Hematopoitic
**Morphology:** Lymphoblast
**Description:** Mouse cell line originated from RBL-5 line which is a Rauscher virus-induced T lymphoma. The cell line is stable transfected with HHD gene and permanently presents the human HLA.A2.1 molecule and is knocked out for the mouse H-$2^d$ MHC.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 2-4 x 10^4 viable cells/ml.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Van Pel, A., P. van der Bruggen, P. G. Coulie, V. G. Brichard, B. Lethe, B. van den Eynde, C. Uyttenhove, J. C. Renauld, T. Boon. 1995. Genes coding for tumor antigens recognized by cytolytic T lymphocytes. Immunol. Rev. 145:229.[Medline]
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C595
**Designation:** Caov-4
**Species:** Human
**Tissue:** Ovary

**Morphology:** Epithelial
**Description:** The Caov-4 cell line was derived from subserosa of the fallopian tube of ovary of an 45 years old Caucasian female with adenocarcinoma.
**Culture Medium:** Leibovitz's L-15 medium with 2mM L-glutamine, 80%; FBS, 20%
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** A subcultivation ratio of 1:2 to 1:3 is recommended
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** HTB-76
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C596
**Designation:** B-CPAP
**Species:** Human
**Tissue:** Thyroid
**Morphology:** Spindle- or round,adherently as monolayer
**Description:** established from the tumor tissue of a 76-year-old woman with metastasizing papillary thyroid carcinoma in 1992
**Culture Medium:** 90% RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split confluent culture 1:4 to 1:6 every 3-4 days using trypsin/EDTA; seed out at ca. 1 x 106 cells/80 cm2
**Isoenzymes:** LDH,G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** ACC 273
**Reference:** Fabien et al., Cancer 73: 2206-2212 (1994), PubMed ID 8156527
**Karyology:** 2n=46, hyperdiploid cell line
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **1** | **2** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **2** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **2** |
| **46** | **47** | **48** | **49** | **50** | **51** | **53** | **55** | **56** | **58** | **59** | **60** | **61** | **62** | **63** | **65** | **69** | **70** | **71** | **73** | **74** | **75** | **77** | **78** | **79** |

**Viability:** 93% ; 1.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C597
**Designation:** 8305C
**Species:** Human
**Tissue:** Thyroid
**Morphology:** Epithelial
**Description:** Established from undifferentiated thyroid carcinomas of a 67 year old female patient. Pathologically the carcinoma tissue contained residual well differentiated components suggesting well differentiated to undifferentiated carcinoma progression. Tumour suppresser genes p53, Rb, APC and MCC were analysed and sequence analysis confirmed a C:G to T:A transition at the first base of p53 gene codon 273. Loss of heterozygosity of tumour suppresser genes was not observed.
**Culture Medium:** EMEM (HBSS) + 2mM Glutamine + 1% Non Essential Amino Acids (NEAA) + 10% Foetal Bovine Serum (FBS). EMEM has been replaced with DMEM in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split sub-confluent cultures (70-80%) 1:3 to 1:6 i.e. seeding at 2-4 x 10,000 cells/cm² using 0.25% trypsin/EDTA; 5% CO2; 37°C. Doubling time is 43 hours. Saturation density at confluency is 5.7x10,000 cells/cm².
**Isoenzymes:** G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 94090183
**Reference:** Cancer Res 1992;52:1369; Int J Oncology 1994;4:583
**Viability:** 94% ; 1.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C598
**Designation:** HSkMC
**Species:** Human
**Tissue:** Muscle
**Morphology:** Fibroblast-like
**Description:** Human skeletal muscle cells are isolated from human muscle of the pectoral girdle.
**Culture Medium:** Skeletal Muscle Cell Growth Medium (151-500) ECACC cat no. 06091507 skeletal muscle cell medium (P60124, Innoprot).
**Preservation Medium:** FBS +5% DMSO

**Subculture Routine:** Prepare a poly-L-lysine coated flask (2µg/cm2, T-75 flask is recommended) and leave the flask in incubator overnight (minimum one hour at 37ºC incubator). A seeding density of 7,500 cells/cm2 is recommended. Dilution and centrifugation of cells after thawing are not recommended. Subculture the cells when they are 80% confluent and plate them in a new poly-L-lysine coated flask. This cell was cultured without Poly-L-Lysine at NCBI.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Grizzle, W.E. and Plot, S.S. (1988), Tissue Culture Methods, 11(4).
**Viability:** 90% ; 1.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C599
**Designation:** HCM
**Species:** Human
**Tissue:** Heart
**Morphology:** Fibroblast-like
**Description:** Human cardiac myocytes are isolated from human heart tissue. The cardiac myocyte is the most physically energetic cell in the body. Its contraction is independent of nervous stimulation.
**Culture Medium:** cardiac myocyte medium (P60103, Innoprot). This cell was adapted to Ham's F12+DMEM (1/1V),FBS10%,Insulin 5µg/ml, bFGF 50 ng/ml at NCBI.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Prepare a poly-L-lysine coated flask (2µg/cm2, T-75 flask is recommended) and leave the flask in incubator overnight (minimum one hour at 37ºC incubator). A seeding density of 7,500 cells/cm2 is recommended. Dilution and centrifugation of cells after thawing are not recommended. Subculture the cells when they are 80% confluent and plate them in a new poly-L-lysine coated flask. This cell was cultured without Poly-L-Lysine at NCBI.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Grizzle, W.E. and Plot, S.S. (1988), Tissue Culture Methods, 11(4).
**Viability:** 93% ; 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C600
**Designation:** A-10
**Species:** Rat
**Tissue:** Muscle
**Morphology:** Epithelial-like
**Description:** Established from the thoracic aorta of a DB1X embryonic rat in 1976; cells were described to display properties characteristic of smooth muscle cells
**Culture Medium:** 80% Dulbecco's MEM + 20% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split confluent culture 1:2 to 1:3 once or twice a week using trypsin/EDTA; after thawing, cells may contain a significant amount of granulae; confluent cultures look more transparent Incubation: at 37 °C with 5-10% CO2
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** DSMZ no.: ACC 132
**Reference:** Kimes et al., Exp Cell Res 98: 349-366 (1976), PubMed ID 943301
**Viability:** 94% ; 1.6 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C601
**Designation:** L6.G8.C5
**Species:** Rat
**Tissue:** Muscle
**Morphology:** Fibroblast
**Description:** A subclone of L6, a rat thigh muscle cell line. On reaching confluence the cells will fuse to form myotubes and twitching movement will be seen. Once cultures have fused they cannot be recloned.
**Culture Medium:** DMEM + 2mM Glutamine + 10% Foetal Bovine Serum (FBS).
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Split semi-confluent cultures to a seeding density of 1.5-2x1,000 cells/cm² using 0.25% trypsin/EDTA; 5% CO2; 37°C. Cells fuse on reaching confluence, producing myotubes. To prevent fusion maintain the cultures sub-confluent and reclone every 6-8 weeks.
**Isoenzymes:** G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 92121114
**Reference:** Proc Natl Acad Sci, USA 1968;61:477; Dev Biol 1970;23:1
**Viability:** 91% ; 1.7 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where

the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C602
**Designation:** TF-1
**Species:** Human
**Tissue:** Hematopoitic
**Morphology:** Lymphoblast
**Description:** The TF-1 cell line was established by T. Kitamura, et al. in October 1987 from a heparinized bone marrow aspiration sample from a 35 year old Japanese male with severe pancytopenia.The cells are completely dependent on interleukin 3 (IL-3) or granulocyte-macrophage colony-stimulating factor (GM-CSF) for long term growth. The cells DO NOT RESPOND to interleukin 5 (IL-5).TF-1 cells respond to a variety of other lymphokines and cytokines such as interleukin 1 (IL-1), interleukin 4 (IL-4), interleukin 6 (IL-6), interleukin 9 (IL-9),Interleukin 11 (IL-11), interleukin 13 (IL-13), stem cell factor (SCF), leukemia inhibitory factor (LIF) and nerve growth factor (NGF).TF-1 cells do not express glycophorin A or carbonyl anhydrase I.The morphological and cytochemical features, and the constitutive expression of globin genes, indicate the commitment of the cells to the erythroid lineage. Hemin and delta-aminolevulinic acid induce hemoglobin synthesis, and TPA induces dramatic differentiation of the TF-1 cells into macrophage-like cells. The TF-1 cell line is unique because of its responsiveness to multiple cytokines and provides a good system for investigating the proliferation and differentiation of myeloid progenitor cells.
**Culture Medium:** RPMI-1640 ,add the following components to the base medium: 2 ng/ml recombinant human GM-CSF; fetal bovine serum to a final concentration of 10%.
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Cultures can be maintained by the addition of fresh medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 2 X 10(4) viable cells/ml. Do not allow the cell concentration to reach 7 X 10(5) cells/ml.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2003
**ECACC Number:** 93022307
**Reference:** 22415: Kitamura T, et al. IL-1 up-regulates the expression of cytokine receptors on a factor- dependent human hemopoietic cell line, TF-1. Int. Immunol. 3: 571-577, 1991. PubMed: 1832294
**Viability:** 91% ; 1.5 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C603
**Designation:** NFS-60
**Species:** Mouse
**Tissue:** Hematopoitic
**Morphology:** Lymphoblast
**Description:** A murine myeloblastic cell line established from leukemic cells obtained after infection of (NFS X DBA/2) F1 adult mice with Cas Br-M murine leukemia virus. NFS-60 cells are dependent on IL-3 for growth and maintenance of viability in vitro. These cells are used to assay murine and human G-CSF. This bipotential murine hematopoietic cell line is responsive to IL-3, GM-CSF, G-CSF, and erythropoietin.
**Culture Medium:** RPMI 1640 medium supplemented with 5.1 ml L-glutamine (200 mM), 1 mM Na-pyruvate, 10% fetal bovine serum and 33 IU/ml mIL-3.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Start cultures at 1 x 105 viable cells/ml, and keep the cell concentration between 5 x 104 and 1 x 106 viable cells/ml.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Weinstein Y et al. Truncation of the c-myb gene by a retroviral integration in an interleukin 3-dependent myeloid leukemia cell line. Proc Natl Acad Sci USA 83: 5010-4, 1986.
**Viability:** 90% ; 1.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C604
**Designation:** 4T1
**Species:** Mouse
**Tissue:** Breast
**Morphology:** Epithelial
**Description:** 4T1 is a 6-thioguanine resistant cell line selected from the 410.4 tumor without mutagen treatment. [49690] When injected into BALB/c mice, 4T1 spontaneously produces highly metastatic tumors that can metastasize to the lung, liver, lymph nodes and brain while the primary tumor is growing in situ. [49690] [49688] The primary tumor does not have to be removed to induce metastatic growth. The tumor growth and metastatic spread of 4T1 cells in BALB/c mice very closely mimic human breast cancer. This tumor is an animal model for stage IV human breast cancer. [49689] [49688] 4T1-induced tumors can be used as a post-operative model as well as a non-surgical model because the 4T1-induced tumor metastasizes spontaneously in both models with similar kinetics. [49689] [49688] [49687] Because 4T1 is resistant to 6-thioquanine, micro-metastatic cells (as few as 1) can be detected in many distant site organs with better accuracy that most tumor models. There is no need to count nodules or

weight target organs. [49687] [49688] [49689]
**Culture Medium:** RPMI-1640+ 10% FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** the cells should not be allowed to become confluent, subculture at 80% of confluence. Remove medium, and rinse with 0.25% trypsin, 0.03% EDTA solution. Remove the solution and add an additional 1 to 2 ml of trypsin-EDTA solution. Allow the flask to sit at room temperature (or at 37C) until the cells detach. Add fresh culture medium, aspirate and dispense into new culture flasks.
**Isoenzymes:** G6PD
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2539
**Reference:** 49690: Aslakson CJ, Miller FR. Selective events in the metastatic process defined by analysis of the sequential dissemination of subpopulations of a mouse mammary tumor. Cancer Res. 52: 1399-1405, 1992. PubMed: 1540948
**Viability:** 90% ; 1.8 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C605
**Designation:** MFP-2
**Species:** Human x Mouse
**Tissue:** Hematopoitic
**Morphology:** Lymphoblast-like
**Description:** Human heteromyeloma cell line trioma MFP-2 . The cell line was generated by fusing a murine myeloma cell line with a human myeloma cell line, producing a heteromyeloma (B6B11), which was subsequently fused with a human lymph node lymphocyte to produce a trioma (MFP-2).
**Culture Medium:** This cell line was adapted to RPMI 1640 and 7% FBS at NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Maintain cultures at 4-6 x 10^5 cells/ml, 5% CO2, 37`C
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** HB-12482™
**Reference:** Human Antibodies 11 (2002) 85–96, U.S. Patent Number: 6,197,582
**Viability:** 93% ; 1.3 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C606
**Designation:** Nb2-11
**Species:** Rat
**Tissue:** Thymus/lymph node
**Morphology:** Lymphoblast
**Description:** Nb2-11 is a clone of the Nb-2 rat lymphoma line which was derived from a transplant of a lymphoma that developed in the thymus/lymph node of a male noble (Nb) strain rat following prolonged oestrogen treatment. The cells are of the pre-T cell origin and their proliferation is dependent on mammalian lactogens, such as prolactin. Nb2-11 can also be mitogenically stimulated by IL-2. Injection of Nb2 cells into Nb rats gives rise to malignant tumours that are highly sensitive to treatment with vinca alkaloids. Karyotypic analysis has shown that the cell line has only five well developed chromosome abnormalities. The cells do not express surface immunoglobulin, and their lactogen dependency was confirmed before deposit. Protocols for the use of Nb2-11 cells in bioassays are available from ECACC on request.
**Culture Medium:** Fischer's medium + 10%Foetal Bovine Serum (FBS) + 10% Horse Serum (HS) (gelding) + 0.075% Na Bicarbonate + 0.05mM 2-Mercaptoethanol (2ME) + 2mM Glutamine. This cell line was adapted to RPMI 1640 + 10% FBS+ 5.1 ml L-glutamine (200 mM)+ 1mM Na-pyruvate and 33 lU/ml mlL-3 in NCBI.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** Seed cultures at 4x1000 and 12x1000 cells/ml for culture periods of 96 and 72 hours respectively. Do not exceed 9x100,000 cells/ml. Avoid using dilutions of cells with fresh medium at greater than 1:10 ratios; culture doubling time 12 hours.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 97041101
**Reference:** Cancer Res 1980;40:2433; Endocrinology 1995;136:5249(review); numerous others available on request
**Viability:** 96% ; 2.2 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C607
**Designation:** A7r5
**Species:** Rat
**Tissue:** Muscle
**Morphology:** Fibroblast
**Description:** The cells exhibit an increase in activity of the enzymes myokinase and creatine phosphokinase (CPK) as the culture reaches stationary phase. Muscle type CPK is synthesized

after cell division has ceased.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Remove and discard culture medium. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. Add appropriate aliquots of the cell suspension to new culture vessels. Incubate cultures at 37°C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1444
**ECACC Number:** 86050803
**Reference:** 1061: Kimes BW, Brandt BL. Characterization of two putative smooth muscle cell lines from rat thoracic aorta. Exp. Cell Res. 98: 349-366, 1976. PubMed: 943301
**Viability:** 90% ;
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C608
**Designation:** BFA
**Species:** Bovine
**Tissue:** Aorta
**Morphology:** Endothelial-like
**Description:** Derived from a bovine foetus.
**Culture Medium:** Ham's F12 + 2mM Glutamine + 20% Foetal Bovine Serum (FBS).
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Split sub-confluent cultures (70-80%) 1:3 to 1:6 i.e. seeding at 2-4x10,000 cells/cm² using 0.25% trypsin or trypsin/EDTA; 5% CO2; 37°C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ECACC Number:** 87022601
**Reference:** Int. Rev. Cytol., l0(Suppl.): 67-76, 1980
**Viability:** 90% ; 1.4 x 10^6 cells/vial
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C609
**Designation:** MCF 10A
**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial
**Description:** The MCF 10A cell line is a non-tumorigenic epithelial cell line. The line was produced by long term culture in serum free medium with low Ca++ concentration. MCF 10A was derived from adherent cells in the population.
**Culture Medium:** The base medium for this cell line is MEBM, which is supplied as part of the MEGM Bullet Kit available from Clonetics Corporation, Catalog No. CC-3150. To make the complete growth medium, add the following components to the base medium: All MEGM SingleQuot additives that are supplied with the kit except the GA-1000 (BPE 13 mg/ml, 2 ml; hydrocortisone 0.5 mg/ml, 0.5 ml; hEGF 10 ug/ml, 0.5 ml; insulin 5 mg/ml, 0.5 ml); 100 ng/ml cholera toxin (sold separately). Temperature: 37.0°C
**Preservation Medium:** FBS + 7.5% DMSO
**Subculture Routine:** Remove medium and rinse monolayer with PBS (ATCC Cat# 30-2200).Add 3.0 ml 0.05% trypsin, 0.53 mM EDTA and incubate at 37C for 15 minutes. To neutralize trypsin, add 3 ml solution of 0.1% soybean trypsin inhibitor.Centrifuge cell suspension at 125 xg for 5 to 10 minutes.Resuspend cell pellet in complete culture medium. Add appropriate aliquots of cell suspension to new culture vessels. Subcultivation Ratio: A subcultivation ratio of 1:3 to 1:4 is recommended Medium Renewal: Every 2 to 3 days
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-10317™
**Reference:** 21968: Soule H, McGrath CM. Immortal human mammary epithelial cell lines. US Patent 5,026,637 dated Jun 25 1991**.** **Viability:**
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C610
**Designation:** GH3/B6
**Species:** Rat
**Tissue:** Pituitary gland
**Morphology:** Epithelial-like
**Description:** These cells are a subclone of the rat pituitary tumour cell line, GH3, which produces prolactin (PRL) and growth hormone.
**Culture Medium:** Ham's F12 + 15% horse serum + 2.5% bovine calf serum
**Preservation Medium:** FBS +5% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6, 0.25% trypsin/EDTA, 5% $CO_2$, 37`C.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Experimental Physiology (1999), 84, 1013-1022.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C611
**Designation:** SH-SY5Y
**Species:** Human
**Tissue:** Nervous tissue
**Morphology:** Neuroblast-like
**Description:** SH-SY5Y is a thrice-cloned sub-line of bone marrow biopsy-derived line SK-N-SH (ECACC catalogue no. 86012802). SH-SY-5Y has dopamine-beta-hydroxylase activity and can convert glutamate to the neurotransmitter GABA. Will form tumours in nude mice in approximately 3-4 weeks. The loss of neuronal characteristics has been described with increasing passage numbers. Therefore it is recommended to verify specific characteristics such as noradrenalin uptake or neuronal markers routinely.
**Culture Medium:** EMEM (EBSS):Ham's F12 (1:1) + 2mM Glutamine + 1% Non Essential Amino Acids (NEAA) + 15% Foetal Bovine Serum (FBS)**.** EMEM has been replaced with DMEM in NCBI.
**Preservation Medium:** 95% FBS + 5% DMSO
**Subculture Routine:** These cells grow as a mixture of floating and adherent cells. The cells grow as clusters of neuroblastic cells with multiple, short, fine cell processes (neurites). Cells will aggregate, form clumps and float. Remove the medium with the floating cells, and recover the cells by centrifugation. Rinse the adherent cells with fresh 0.25% trypsin, 0.53 mM EDTA solution, add an additional 1 to 2 ml of trypsin solution, and let the culture sit at room temperature (or at 37°C) until the cells detach. Add fresh medium, aspirate, combine with the floating cells recovered above and dispense into new flasks. A subcultivation ratio of 1:20 to 1:50 is recommended. Medium Renewal: Every 4 to 7 days. Temperature: 37°C, Atmosphere: air, 95%; carbon dioxide ($CO_2$), 5%.
**ATCC Number:** CRL-2266
**ECACC Number:** 94030304
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J. Natl. Cancer Inst. 71: 741-749, 1983. Cancer Res. 38: 3751-3757, 1978.
**Viability:** 94% ;
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C612
**Designation:** Aedes albopictus clone C6/36
**Species:** Mosquito, Asian tiger
**Tissue:** Larva, whole
**Morphology:** Larval insect cell, adherent
**Description:** This cell line is useful for the replication of flaviviruses and reportedly can be used to replicate Dengue viruses to high titers. The cells are non-anchorage dependent, are not tumorigenic and maintain a diploid chromosome number.
**Culture Medium:** Eagle's Minimum Essential Medium+10% FBS. EMEM has been replaced with DMEM in NCBI.
**Preservation Medium:** 95% FBS + 5% DMSO
**Subculture Routine:** Subcultures are prepared by scraping or by vigorous pipetting. Remove the old medium, add fresh complete culture medium, dislodge cells from the floor of the flask, aspirate and dispense into new flasks. Subcultivation Ratio: A subcultivation ratio of 1:4 to 1:10 is recommended Medium Renewal: Twice per week Atmosphere: air, 95%; carbon dioxide ($CO_2$), 5%. Temperature: 28.0°C
**ATCC Number:** CRL-1660
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J. Gen. Virol. 40: 531-544, 1978. Curr. Sci. 36: 506-508, 1967.
**Viability:** 92%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C613
**Designation:** LAN-5
**Species:** Human
**Tissue:** Nervous tissue
**Morphology:** Continuous culture, grown as monolayer, morphology neuroblast-like
**Description:** This cell line has established from the neuroblastoma tumor of human.
**Culture Medium:** RPMI 1640 + 10% FBS + 0.5% L-Glutamine + 2.5% HEPES
**Preservation Medium:** 95% FBS + 5% DMSO
**Subculture Routine:** Split confluent cultures 1:3-1:4 using trypsin/EDTA; seed at 2-4x10^4 cells/cm2. As they are semi-adherent, the flasks and plates should be precoated with collagen. Temperature: 37°C, Atmosphere: air, 95%; carbon dioxide ($CO_2$), 5%.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J. Neurosci. Res. 8:375-391, 1982.
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide

sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C614
**Designation:** BE(2)-M17
**Species:** Human
**Tissue:** Nervous tissue
**Morphology:** Neuroblast-like
**Description:** The cell line BE(2)-M17 was isolated from SK-N-BE(2) (ECACC catalogue no. 95011815) by limiting dilution. The cells show a population doubling time of 20-24 hours, grow in multi-layers but start to aggregate and float as the culture ages. The neuroblastic cells express properties of neuroadrenergic neurones and multiple, moderately long cell processes. BE(2)-M17 showed tyrosine hydroxylase and dopamine-ß-hydroxylase activity and specific uptake of norepinephrine (noradrenalin). Expression of intermediate filaments was detected as well as neuron-specific enolase and moderate expression of vimentin. BE(2)-M17 are tumorigenic in nude mice.
**Culture Medium:** EMEM (EBSS):Ham's F12 (1:1) + 2mM Glutamine + 1% Non Essential Amino Acids (NEAA) + 15% Foetal Bovine Serum (FBS)**.** EMEM has been replaced with DMEM in NCBI.
**Preservation Medium:** 95% FBS + 5% DMSO
**Subculture Routine:** A subcultivation ratio of 1:8 to 1:20 is recommended. Remove spent medium, add fresh 0.25% trypsin, 0.03% EDTA solution, rinse and remove trypsin. Medium Renewal: Every 4 to 7 days. Temperature: 37°C, Atmosphere: air, 95%; carbon dioxide ($CO_2$), 5%.
**ATCC Number:** CRL-2267
**ECACC Number:** 95011816
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Cancer Res.49:219, 1989; Cancer Res. 53:4978, 1993.
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C615
**Designation:** MKN-45
**Species:** Human

**Tissue:** Gastric
**Morphology:** Both spindle-shaped or oval cells growing in monolayers and single round cells or clumps in suspension
**Description:** This cell line has established from the poorly differentiated adenocarcinoma of the stomach (medullary type) of a 62-year-old woman.
**Culture Medium:** 80% RPMI 1640 + 20% FBS
**Preservation Medium:** 95% FBS + 5% DMSO
**Subculture Routine:** Split semi-confluent culture 1:3 to 1:5 every 5-10 days using trypsin/EDTA (for 5 min or longer); seed out at ca. 1-2 x 10^6 cells/80 $cm^2$; culture medium may turn acidic (yellow) very quickly, exchange of spent medium is advised, the cells in suspension may be used to seed a new flask. Temperature: 37°C, Atmosphere: air, 95%; carbon dioxide ($CO_2$), 5%.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Virchows Arch B Cell Pathol Incl Mol Pathol. 46: 145-154,1984. Acta Pathol Jpn. 36: 65-83,1986. Cancer Genet. Cytogen. 64: 170-173,1992.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C616
**Designation:** K4IM
**Species:** Human
**Tissue:** Synovial fluid
**Morphology:** Fibroblast-like
**Description:** K4IM is human synoviocyte line from a healthy donor by immortalization with SV40 T antigen (Tag). The immortalized K4IM cell line represents a valuable and unique tool to study mechanisms that induce or maintain synoviocyte activation.
**Culture Medium:** DMEM + 10%FBS
**Preservation Medium:** 95% FBS + 5% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6 every 2-3 days, i.e. seeding at 2-4 x 10^4 cells/$cm^2$ using 0.25% trypsin/EDTA. Temperature: 37°C, Atmosphere: air, 95%; carbon dioxide ($CO_2$), 5%.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Rheumatol. Int. 16:241-247, 1997.
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C617
**Designation:** OLN-93
**Species:** Rat
**Tissue:** Brain
**Morphology:** Fibroblast-like
**Description:** OLN-93 is derived from spontaneously transformed cells in primary rat brain glial cultures. Primary cultures of glial cells were prepared from the brains of I-day-old Wistar rats. OLN-93 cells in their antigenic properties resemble primary oligodendro- cytes in culture.
**Culture Medium:** DMEM+10%FBS
**Preservation Medium:** 95% FBS + 5% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:6 every 2-3 days, i.e. seeding at 2-4 x 10^4 cells/$cm^2$ using 0.25% trypsin/EDTA. Temperature: 37°C, Atmosphere: air, 95%; carbon dioxide ($CO_2$), 5%.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J. Neurosci. Res. 45161-173,1996.
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C618
**Designation:** DT40
**Species:** Chicken
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** DT40 is an avian leukosis virus (ALV) induced bursa lymphoma cell line derived from a Hyline SC chicken. The original lymphoma was induced by viral infection of a 1 day old chicken with Rous associated virus 1 (RAV-1). Cell suspensions prepared from tumors that developed within the bursa of Fabricus were transferred intravenously into young syngeneic recipient chickens.
**Culture Medium:** Dulbecco's modified Eagle's medium with 4 mM L-glutamine modified to contain 4.5 g/L glucose, 1.5 g/L sodium bicarbonate and 0.05 mM 2-mercaptoethanol, 75%; tryptose phosphate broth, 10%; fetal bovine serum, 10%; chicken serum, 5% .
**Preservation Medium:** 95% FBS + 5% DMSO
**Subculture Routine:** Start cultures at 3 x 10^5 cells/ml and maintain between 2 x 10^5 and 2 x 10^6 cells/ml. Medium Renewal: Every 2 to 3 days. Temperature: 37°C, Atmosphere: air,

95%; carbon dioxide ($CO_2$), 5%.
**ATCC Number:** CRL-2111
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Virology 144: 139-151,1985. EMBO J. 9: 921-927,1990. Cell 67: 179-188,1991.
**Viability:** 89%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C619
**Designation:** MCA-3D
**Species:** BALB/c Mouse
**Tissue:** Skin
**Morphology:** Epithelial-like
**Description:** The cell line MCA-3D was selected in normal serum medium after DMBA/TPA treatment of primary epidermal cultures of neonatal Balb/c mice.
**Culture Medium:** Minimum essential medium (Eagle) in Earle's BSS supplemented with 2 mM L-glutamine, 1% non-essential amino acids and 10% fetal bovine serum. As an alternative, Ham's F12 medium supplemented with 2 mM L-glutamine and 10% fetal bovine serum may be used. EMEM has been replaced with DMEM in NCBI.
**Preservation Medium:** 95% FBS + 5% DMSO
**Subculture Routine:** Remove medium, rinse with calcium and magnesium free PBS, add fresh 0.25% trypsin solution for 3 to 5 minutes at room temperature until the cells detach. Add fresh medium, aspirate and dispense into new flasks. Subculture every 6 to 8 days. A ratio of 1:4 to 1:8 is recommended. Fluid Renewal: 2 to 3 times weekly. Temperature: 37°C, Atmosphere: air, 95%; carbon dioxide (CO2), 5%.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Carcinogenesis 4: 1367-1377, 1983. Mol. Cacinog. 4(2): 129-137, 1991. Exp. Cell. Res. 195(1): 183-193, 1991.
**Viability:** 93%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C620
**Designation:** C28/I2

**Species:** Human
**Tissue:** Cartilage
**Morphology:** Epithelial-like
**Description:** Immortalized human chondrocytes were established by transfection of primary cultures of juvenile costal chondrocytes with vectors encoding simian virus 40 large T antigen and selection in suspension culture over agarose. Stable cell lines were generated that exhibited chondrocyte morphology, countinous proliferative capacity (>80 passages) in monolayer culture in serum-containing medium, and expression of mRNAs encoding chondrocyte-specific collagens II, IX and XI and proteoglycans in an insulin-containing serum substitute.
**Culture Medium:** DMEM+Ham's F12 (1:1) + 10%FBS
**Preservation Medium:** 95% FBS + 5% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, i.e. seeding at 1-3 x 10^4 cells/cm2 using 0.25% trypsin/EDTA.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J. Clin. Invest. 94(6): 9307-16, 1994.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C621
**Designation:** M-07e
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Single round cells in suspension, a few cells are lightly adherent.
**Description:** M-07e established from the peripheral blood of a 6-month-old girl with acute megakaryoblastic leukemia (AML M7) at diagnosis in 1987; subline of the growth factor-independent cell line M-07; M-07e cells respond proliferatively to GM-CSF, IFN-alpha, IFN-ß, IFN-gamma, IL-2, IL-3, IL-4, IL-6, IL-15, NGF, SCF, TNF-alpha, TPO; we have noted that the cell line can become very quickly cytokine-independent (within 3-4 weeks), presumably due to outgrowth of independent cells
**Culture Medium:** 80-90% Iscove's MDM or RPMI 1640 + 10-20% FBS + IL-3 (10 ng/ml) or GM-CSF (10 ng/ml) or 10-20% vol conditioned medium of cell line 5637. This cell line was cultured with 85% RPMI 1640 + 15% FBS + GM-CSF (10 ng/ml) in NCBI.
**Preservation Medium:** 95% FBS + 5% DMSO
**Subculture Routine:** Maintain at 0.5-1.0 x 10^6 cells/ml, split 1:2 to 1:3 every two days; seed out at about 4 x 105 cells/ml. Temperature: 37°C, Atmosphere: air, 95%; carbon dioxide (CO2), 5%.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Br. J. Haematol. 69: 359-366, 1988. J. Cell. Physiol. 145: 458-464, 1990. Leukemia 11: 701-708, 1997.

**Viability:** 91%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C622
**Designation:** BHY
**Species:** Human
**Tissue:** Alveolus
**Morphology:** Epithelial-like polygonal or round and flat cells (sometimes spindle-form, very heterogenous) growing in monolayers.
**Description:** Established from the tumor of a 52-year-old Japanese man with highly differentiated squamous cell carcinoma of the lower alveolus which was highly invasive to the mandibular bone and the muscle layer of the oral floor; described as anchorage- independent and to be tumorigenic in nude mice.
**Culture Medium:** 90% DMEM + 10% FBS
**Preservation Medium:** 90%FBS+ 10% DMSO
**Subculture Routine:** Split confluent culture 1:2 to 1:3 every 3-5 days using trypsin/EDTA; seed out at ca. $1\text{-}2*10^6$ cells/80 $cm^2$ in 15 ml medium, 5% CO2, 37°C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** DSMZ no.:ACC 404
**ECACC Number:** -
**Reference:** Kawamata et al. Int J Cancer, 70:120-127 (1997).
**Viability:** 85%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C623
**Designation:** Densovirus free C6/36 Aedes albopictus
**Species:** Mosquito, Asian tiger
**Tissue:** Larva, whole
**Morphology:** Larval insect cell, adherent
**Description:** This cell line is useful for investigation of Densovirus in insects.
**Culture Medium:** L15 +**10% TPB** + 1.2% Pen/Strep + 10% FBS
**Preservation Medium:** 10% DMSO + 90% FBS

**Subculture Routine:** Subcultures are prepared by scraping or by vigorous pipetting. Remove the old medium, add fresh complete culture medium, dislodge cells from the floor of the flask, aspirate and dispense into new flasks. Subcultivation Ratio: A subcultivation ratio of 1:4 to 1:10 is recommended Medium Renewal: Twice per week Atmosphere: air, 95%; carbon dioxide ($CO_2$), 5%. Temperature: 28.0°C**.**
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** -
**Reference:** -
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C624
**Designation:** NCCIT
**Species:** Human
**Tissue:** Anterior mediastinum
**Morphology:** Epithelial
**Description:** Disease: pluripotent embryonal carcinoma; teratocarcinoma. NCCIT was established from a mediastinal mixed germ cell tumor. This pluripotent stem cell line is capable of somatic and extraembryonic differentiation. The undifferentiated cells are equivalent to a stage intermediate between seminoma and embryonal carcinoma.They will differentiate in response to retinoic acid. NCCIT cells are negative for keratin. They are positive for vimentin and placental alkaline phosphatase.
**Culture Medium:** 90% RPMI-1640 + 10% FBS
**Preservation Medium:** 95%FBS+ 5% DMSO
**Subculture Routine:** Subcultivation Ratio: A subcultivation ratio of 1:4 to 1:8 is recommended. Medium Renewal: Add fresh medium at the time of subculture Remove spent medium, add fresh 0.25% trypsin, 0.03% EDTA solution, rinse and remove trypsin. Let the culture sit at room temperature (or at 37C) for 2 to 5 minutes. Add fresh medium, aspirate and dispense into new flasks. Subculture two times weekly.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2073
**ECACC Number:** -
**Reference:** Teshima S, et al. Four new human germ cell tumor cell lines. Lab. Invest. 59: 328-336, 1988. Damjanov I, et al. Retinoic acid-induced differentiation of the evelopmentally pluripotent human germ cell tumor-derived cell line, NCCIT. Lab. Invest. 68: 220-232, 1993.
**Viability:** 85%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where

the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C625
**Designation:** D-17
**Species:** Dog (Canis familiaris)
**Tissue:** Bone
**Morphology:** Epithelial like
**Description:** Derived from an osteosarcoma metastatic to the lung in an 11-year-old female poodle. Applications: transfection host. Virus Susceptibility: Canine adenovirus 1
Canine herpesvirus. Tumorigenic:in immunosuppressed mice; in nude mice.Reverse transcriptase:negative.
**Culture Medium:** 90% RPMI-1640 + 10% FBS
**Preservation Medium:** 90%FBS+ 10% DMSO
**Subculture Routine:** Remove and discard culture medium. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).
Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. Add appropriate aliquots of the cell suspension to new culture vessels. Incubate cultures at 37°C. Subcultivation Ratio: A subcultivation ratio of 1:3 to 1:8 is recommended. Medium Renewal: 2 to 3 times per week**.**
Atmosphere: air, 95%; carbon dioxide (CO2), 5% .Temperature: 37.0°C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-183
**ECACC Number: -**
**Reference:** Temin HM, Watanabe S. Helper cell. US Patent 4,650,764 dated Mar 17 1987. Riggs JL, et al. Immunofluorescent studies of RD-114 virus replication in cell culture. J. Gen. Virol. 25: 21-29, 1974. Cancer Res. 16: 185, 1975. Cancer Res. 16: 104, 1975.
**Viability:** 85%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C626
**Designation:** HS-5
**Species:** Human
**Tissue:** Stroma
**Morphology:** Fibroblast like
**Description:** Derived from a 30-year-old Caucasian male. Cellular Products: : granulocyte colony-stimulating factor (G-CSF),granulocyte-macrophage-CSF (GM-CSF), macrophage-CSF (M-CSF), Kit ligand (KL), macrophage-inhibitory protein-1 alpha, interleukin-1 alpha (IL-1alpha), IL-1beta, IL-1RA, IL-6, IL-8, IL-11, and leukemia inhibitory factor (LIF). Long term bone marrow cells were transformed with the amphotropic retrovirus vector LXSN16E6E7 in the presence of polybrene. Twenty-seven immortalized clones designed HS-1 to HS-27 were isolated. One of these cell lines HS-27A (CRL-2496) has been deposited in the ATCC 's general collection. One cell line (HS-5) has been deposited in the Patent Depository. HS-5 supports proliferation of hematopoietic progenitor cells when cocultured in serum-deprived media with no exogenous factors.HS-23 and HS-27A secrete low levels of growth factors and do not support proliferation of isolated progenitor cells in cocultures.The cell line can also be used as a feeder layer in ex vivo bone marrow cultures or in colony forming assays. Organ: bone marrow.Cell Type: HPV-16 E6/E7 transformed.
**Biosafety Level: 2 [Cells contain human papilloma viral sequences ]**
**Culture Medium:** RPMI-1640 + 20% FBS + MEM NEAA 1x+ Sodium Pyruvate 1mM
**Preservation Medium:** 10% DMSO + 90% FBS
**Subculture Routine:** Remove and discard culture medium. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placedat 37°C to facilitate dispersal. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting. Add appropriate aliquots of the cell suspension to new culture vessels. Incubate cultures at 37°C. Subcultivation Ratio: A subcultivation ratio of 1:3 to 1:9 is recommended medium renewal: Everh 2 to 3 days**.**
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-11882
**ECACC Number:** -
**Reference:** Roecklein BA, Torok-Storb B. Functionally distinct human marrow stromal cell lines immortalized by transduction with the human papilloma virus E6/E7 genes. Blood 85: 997-1005, 1995. Torok-Storb B, et al. Human marrow stromal cell lines which sustain hematopoieses. US Patent 5,879,940 dated Mar 9 1999**.**
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C627
**Designation:** CF41.Mg
**Species:** Dog (Canis familiaris)
**Tissue:** Mammary gland
**Morphology:** -
**Description:** Biopsy specimen from a 10-year-old female animal with a mammary tumor. This cell line is neither produced nor fully characterized by ATCC . ATCC dose not guarantee that it will maintain a specific morphology, purity, or any other property upon passage. Please see the NBL Repository description at ATCC.
**Culture Medium:** DMEM + 20% FBS + MEM NEAA 1x
**Preservation Medium:** 10% DMSO + 90% FBS
**Subculture Routine:** Subcultivation Ratio: A subcultivation ratio of 1:2 is recommended Remove medium, and rinse with 0.25% trypsin, 0.03% EDTA solution. Remove the solution and add an additional 1 to 2 ml of trypsin-EDTA solution. Allow the flask to sit at room temperature (or at 37C) until the cells detach. Add fresh culture medium, aspirate and dispense into new culture flasks.
Atmosphere: air, 95%; carbon dioxide (CO2), 5% Temperature: 37.0°C .
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-6232
**ECACC Number:** -
**Reference:** -
**Viability:** 94%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C628
**Designation:** MCF-HGH
**Species:** Human
**Tissue:** Breast, mammary gland
**Morphology:** Epithelial like
**Description:** Derived from adenocarcinoma of mammary gland from a 69-year-old Caucasian female. This cell line is useful for investigation of effects of autocrine human growth hormone in enhancement of invasional properties of breast cancer cells.
**Culture Medium:** EMEM (EBSS) + 1% NEAA + 10% FBS. The cell line was adapted to RPMI 1640 + 10% FBS in NCBI.
**Preservation Medium:** 10% DMSO + 90% FBS
**Subculture Routine:** Split confluent cultures 1:2 to 1:6, seeding at 2-4 x 10^4 cells/cm^2 using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** -
**Reference:** Mojarrad, M., et al., Autocrine human growth hormone expression leads to resistance of MCF-7 cells to tamoxifen. Med Oncol. 27(2): p. 474-80. Tao Zhu, Zhe Zhu, Kok-Onn Lee, Peter D. Gluckman, Peter E. Lobie, alpha-CP1 Mediates Stabilization of hTERT mRNA by Autocrine Human Growth Hormone. THE JOURNAL OF BIOLOGICAL CHEMISTRY January 5, 2007. 282(1): p. 680-690. Jo K. Perry, B.S.E., Hichem C. Mertani, Peter E. Lobie, The oncogenic potential of growth hormone. Growth Hormone & IGF Research 2006. 16: p. 277-289. Lobie, P.E., et al., The cellular mechanism of growth hormone signal transduction. Acta Paediatr Suppl, 1994. 406: p. 39-46; discussion 47. Karmaljeet K. Kaulsay, H.C.M., Jan To¨rnell, Ge´rard Morel, Kok-Onn Lee, Peter E. Lobie, Autocrine Stimulation of Human Mammary Carcinoma Cell Proliferation by Human Growth Hormone. Experimental Cell Research 1999. 250: p. 35-50.Tao Zhu, B.S.-E., Xin Zhang, Kok-Onn Lee, Peter D. Gluckman, Hichem C. Mertani, Peter E. Lobie, Oncogenic Transformation of Human Mammary Epithelial Cells by Autocrine Human Growth Hormone. Cancer Res January 1, 2005. 65(1): p. 317-24. Svetlana Mukhina, H.C.M., Ke Guo, Kok-Onn Lee, Peter D. Gluckman, Peter E. Lobie, Phenotypic conversion of human mammary carcinoma cells by autocrine human growth hormone. PNAS October 19, 2004. 101(42): p. 15166-15171.
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C629
**Designation:** HEK-Blue-TLR2
**Species:** Human
**Tissue:** Embryonic kidney
**Morphology:** Epithelial like (semi-adherent)
**Description:** HEK-Blue-TLR2 cells are engineered HEK293 cells that stably co-express the human TLR2 and an NF- k B-inducible SEAP (secreted embryonic alkaline phosphatase) reporter gene. These cells were thoroughly tested and validated by InvivoGen. The following data were obtained using the QUANTI-Blue or HEK-Blue Detection assays. These assays allow the detection of SEAP production following TLR/NOD activation by reading the optical density (OD) at 655 nm. This cell line has been transformed by adenovirus type 5.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** 10% DMSO + 90% FBS
**Subculture Routine:**
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-
**ECACC Number:**-

**Reference:** Girard R. *et al.*, 2003. Lipopolysaccharides from Legionella and Rhizobium stimulate mouse bone marrow granulocytes via Toll-like receptor 2. J Cell Sci. 116:293-302. Ozinsky A. *et al*., 2000. The repertoire for pattern recognition of pathogens by the innate immune system is defined by cooperation between toll-like receptors. Proc Natl Acad Sci USA. 97:13766-71. Thakran S. *et al*., 2008. Identification of Francisella tularensis lipoproteins that stimulate the Toll-like receptor (TLR) 2/TLR1 heterodimer. J Biol Chem 283: 3751-9. Sandor F. *et al*., 2003. Importance of extra- and intracellular domains of TLR1 and TLR2 in NFkB signaling. J Cell Biol. 162: 1099-10. Lotz S. *et al.*, 2004. Highly purified lipoteichoic acid activates neutrophil granulocytes and delays their spontaneous apoptosis via CD14 and TLR2. J Leukoc Biol. 75(3):467-77.
**Viability:** 93%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C630
**Designation:** HEK293-hTLR2/6
**Species:** Human
**Tissue:** Embryonic kidney
**Morphology:** Epithelial like (semi-adherent)
**Description:** 293-hTLR2/6 cells are designed for studying the stimulation of human TLR2/6 (hTLR2/6). 293-hTLR2/6 cells were obtained by co-transfection of the hTLR2and TLR6 genes.HEK293 cells express endogenous levels of TLR1, TLR3, TLR5, and NOD1. *Note: The control cell line for 293-hTLR2/6 cells is 293/null cells (cells which do not express hTLR2).* TLR2 is involved in the recognition of a wide array of microbial molecules. TLR2 recognizes peptidoglycan, lipoteichoic acid and lipoprotein from gram-positive bacteria, lipoarabinomannan from mycobacteria, and zymosan from yeast cell wall. TLR2 cooperates with TLR6 in response to diacylated mycoplasmal lipopeptide, and associates with TLR1 to recognize triacylated lipopetides. Simultaneous expression of the extracellular and intracellular domains of both TLR1 and TLR2 is essential for ligand recognition and subsequent ligand-induced signal activation. Furthermore, pathogen recognition by TLR2 is strongly enhanced by CD14. Stimulation of TLR2/6 triggers a signaling cascade leading to the activation of the transcription factor NF-kB and the production of pro-inflammatory cytokines such as IL-8. 293-hTLR2/6 cells should not be passaged more than 20 times to remain fully efficient. 293-hTLR2/6 cells should be maintained in Growth Medium as described below in the presence of Blasticidin (10 ³g/ml). Antibiotic pressure with Blasticidin is required to maintain the plasmid coding for hTLR2 and TLR6.
**Culture Medium:** DMEM, 4.5 g/l glucose, 10% (v/v) fetal bovine serum, 50 U/ml penicillin, 50 µg/ml streptomycin, 100 µg/ml Normocin, 2 mM L-glutamine.
**Preservation Medium:** DMEM, 4.5 g/l glucose, 20% (v/v)fetal bovine serum, 50 U/ml penicillin, 50 mg/ml streptomycin, 100 mg/ml Normocin, 2 mM L-glutamine, 10% (v/v)

DMSO.
**Subculture Routine:** 1- Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid. 2- Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% (v/v) ethanol.
*Note: All steps from this point should be carried out under strict aseptic conditions.*
3- Transfer cells in a larger vial containing 15 ml of pre-warmed Growth Medium. do not add selective antibiotics until the cells have been passaged twice.4- Centrifuge vial at 1000-1200 RPM (RCF 200-300 g) for 5 minutes. 5- Remove supernatant containing the cryoprotective agent and resuspend cells with 1 ml of Growth Medium without selective antibiotics. 6- Transfer the vial contents to a 25 $cm^2$ tissue culture flask containing 5 ml of Growth Medium without selective antibiotics. 7- Place the culture at 37°C in 5% $CO_2$.
Renew Growth Medium 2 times a week. Cells should be passaged when a 70-80% confluency is reached,
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-
**ECACC Number:** -
**Reference:** Girard r et al., 2003. Lipopolysaccharides from Legionella and Rhizobium stimulate mouse bone marrow granulocytes via Toll-like receptor 2. J Cell Sci. 116:293-302. Ozinsky A. et al., 2000. The repertoire for pattern recognition of pathogens by the innate immune system is defined by cooperation between toll-like receptors. Proc Natl Acad Sci USA. 97:13766-71. Thakran s. et al., 2008. Identification of Francisella tularensis lipoproteins that stimulate the Toll-like receptor (TLR) 2/TLR1 heterodimer. J Biol Chem 283: 3751-9. Sandor f. et al., 2003. Importance of extra- and intracellular domains of TLR1 and TLR2 in NFkB signaling. J Cell Biol. 162: 1099-10. Lotz s. et al., 2004.Highly purified lipoteichoic acid activates neutrophil granulocytes and delays their spontaneous apoptosis via CD14 and TLR2. J Leukoc Biol. 75(3):467-77.
**Viability:** 97%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C631
**Designation:** HEK293-Blue-hTLR4-CD14-MD2
**Species:** Human
**Tissue:** Embryonic kidney
**Morphology:** Epithelial like (semi-adherent)
**Description:** 293-hTLR4A-MD2-CD14 cells are designed for studying the stimulation of human TLR4 (hTLR4). 293-hTLR4A-MD2-CD14 cells were obtained by co-transfection of the hTLR4a, MD2 and CD14 genes.HEK293 cells express endogenous levels of TLR1, TLR3, TLR5, TLR6 and NOD1. *Note: The control cell line for 293-hTLR4A-MD2-CD14 cells is*

*293/null cells (cells which do not express hTLR4).* TLR4, the first human TLR identified, is the receptor for Gram-negative lipopolysaccharide (LPS). The TLR4 gene was shown to be mutated in C3H/HeJ and C57BL/10ScCr mice, both of which are low responders to LPS. However, TLR4 alone is not sufficient to confer LPS responsiveness. TLR4 requires MD-2, a secreted molecule, to functionally interact with LPS. Furthermore, a third protein, called CD14, was shown to participate in LPS signaling, leading to NF-kB translocation. This signaling is mediated through several adaptor proteins: MyD88 TIRAP/Mal, TRIF/TICAM1 and TRAM/TICAM2.
293-hTLR4A-MD2-CD14 cells should not be passaged more than 20 times to remain fully efficient. 293-hTLR4A-MD2-CD14 cells should be maintained in Growth Medium as described below in the presence of Blasticidin (30 ug/ml) and Zeocin (100 ug/ml). Antibiotic pressure with Blasticidin is required to maintain the plasmid coding for hTLR4a and HygroGold to maintain the plasmid coding for MD2 and CD14.
**Culture Medium:** DMEM, 4.5 g/l glucose, 10% (v/v) fetal bovine serum, 50 U/ml penicillin, 50 µg/ml streptomycin, 100 µg/ml Normocin, 2 mM L-glutamine.
**Preservation Medium:** DMEM, 4.5 g/l glucose, 20% (v/v)fetal bovine serum, 50 U/ml penicillin, 50 mg/ml streptomycin, 100 mg/ml Normocin, 2 mM L-glutamine, 10% (v/v) DMSO**.**
**Subculture Routine:** 1- Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid. 2- Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% (v/v) ethanol.
*Note: All steps from this point should be carried out under strict aseptic conditions.*
3- Transfer cells in a larger vial containing 15 ml of pre-warmed Growth Medium. do not add selective antibiotics until the cells have been passaged twice.4- Centrifuge vial at 1000-1200 RPM (RCF 200-300 g) for 5 minutes. 5- Remove supernatant containing the cryoprotective agent and resuspend cells with 1 ml of Growth Medium without selective antibiotics. 6- Transfer the vial contents to a 25 $cm^2$ tissue culture flask containing 5 ml of Growth Medium without selective antibiotics. 7- Place the culture at 37°C in 5% $CO_2$.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-
**ECACC Number:** -
**Reference:** 1. Poltorak A. et al., 1998.Defective LPS signaling in C3H/HeJ and C57BL/10ScCr mice: mutations in Tlr4 gene. Science, 282(5396):2085-8.
2. shimazu r. et al., 1999.MD-2, a molecule that confers lipopolysaccharide responsiveness on Toll-like receptor 4. J Exp Med, 189(11):1777- 82.
3. Horng t. gM. Barton, and r. Medzhitov, 2001. TIRAP: an adapter molecule in the Toll signaling pathway. Nat Immunol, 2(9):835-41.
4. fitzgerald KA. et al., 2003.LPS-TLR4 Signaling to IRF-3/7 and NF-{kappa}B Involves the Toll Adapters TRAM and TRIF. J Exp Med. 198(7):1043-1055.
**Viability:** 97%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C632
**Designation:** HEK293-TLR2-CD14
**Species:** Human
**Tissue:** Embryonic kidney
**Morphology:** Epithelial like (semi-adherent)
**Description:** 293-hTLR2-CD14 cells are designed for studying the stimulation of human TLR2 (hTLR2). 293-hTLR2-CD14 cells were obtained by co-transfection of the hTLR2and CD14 genes.HEK293 cells express endogenous levels of TLR1, TLR3, TLR5, TLR6 and NOD1. *Note: The control cell line for 293-hTLR2-CD14 cells is 293/null cells (cells which do not express hTLR2).* TLR2 is involved in the recognition of a wide array of microbial molecules. TLR2 recognizes peptidoglycan, lipoteichoic acid and lipoprotein from gram-positive bacteria, lipoarabinomannan from mycobacteria, and zymosan from yeast cell wall. TLR2 cooperates with TLR6 in response to diacylated mycoplasmal lipopeptide, and associates with TLR1 to recognize triacylated lipopetides. Simultaneous expression of the extracellular and intracellular domains of both TLR1 and TLR2 is essential for ligand recognition and subsequent ligand-induced signal activation
. Furthermore, pathogen recognition by TLR2 is strongly enhanced by CD14. Stimulation of TLR2 triggers a signaling cascade leading to the activation of the transcription factor NF-kB and the production of pro- inflammatory cytokines such as IL-8.
293-hTLR2-CD14 cells should not be passaged more than 20 times to remain fully efficient. 293-hTLR2-CD14 cells should be maintained in Growth Medium as described below in the presence of Puromycin (5 ug/ml).
**Culture Medium:** DMEM, 4.5 g/l glucose, 10% (v/v) fetal bovine serum, 50 U/ml penicillin, 50 µg/ml streptomycin, 100 µg/ml Normocin, 2 mM L-glutamine.
**Preservation Medium:** DMEM, 4.5 g/l glucose, 20% (v/v)fetal bovine serum, 50 U/ml penicillin, 50 mg/ml streptomycin, 100 mg/ml Normocin, 2 mM L-glutamine, 10% (v/v) DMSO**.**
**Subculture Routine:** 1- Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid. 2- Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% (v/v) ethanol.
*Note: All steps from this point should be carried out under strict aseptic conditions.*
3- Transfer cells in a larger vial containing 15 ml of pre-warmed Growth Medium. do not add selective antibiotics until the cells have been passaged twice.4- Centrifuge vial at 1000-1200 RPM (RCF 200-300 g) for 5 minutes. 5- Remove supernatant containing the cryoprotective agent and resuspend cells with 1 ml of Growth Medium without selective antibiotics. 6- Transfer the vial contents to a 25 $cm^2$ tissue culture flask containing 5 ml of Growth Medium without selective antibiotics. 7- Place the culture at 37°C in 5% $CO_2$.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-

**ECACC Number:** -
**Reference:** Girard r et al., 2003. Lipopolysaccharides from Legionella and Rhizobium stimulate mouse bone marrow granulocytes via Toll-like receptor 2. J Cell Sci. 116:293-302. Ozinsky A. et al., 2000. The repertoire for pattern recognition of pathogens by the innate immune system is defined by cooperation between toll-like receptors. Proc Natl Acad Sci USA. 97:13766-71. Thakran s. et al, 2008. Identification of Francisella tularensis lipoproteins that stimulate the Toll-like receptor (TLR) 2/TLR1 heterodimer. J Biol Chem 283: 3751-9. Sandor f. et al, 2003. Importance of extra- and intracellular domains of TLR1 and TLR2 in NFkB signaling. J Cell Biol. 162: 1099-10. Lotz s. et al., 2004.Highly purified lipoteichoic acid activates neutrophil granulocytes and delays their spontaneous apoptosis via CD14 and TLR2. J Leukoc Biol. 75(3):467-77.
**Viability:** 93%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C633
**Designation:** HEK293-TLR4-CD14
**Species:** Human
**Tissue:** Embryonic kidney
**Morphology:** Epithelial like (semi-adherent)
**Description:** 293-hTLR4-CD14 cells are designed for studying the stimulation of human TLR4 (hTLR4). 293-hTLR4-CD14 cells were obtained by co-transfection of the hTLR4and CD14 genes.HEK293 cells express endogenous levels of TLR1, TLR3, TLR5, TLR6 and NOD1. *Note: The control cell line for 293-hTLR4-CD14 cells is 293/null cells (cells which do not express hTLR2).*
293-hTLR2-CD14 cells should not be passaged more than 20 times to remain fully efficient. 293-hTLR2-CD14 cells should be maintained in Growth Medium as described below in the presence of Puromycin (5 ug/ml).
**Culture Medium:** DMEM, 4.5 g/l glucose, 10% (v/v) fetal bovine serum, 50 U/ml penicillin, 50 µg/ml streptomycin, 100 µg/ml Normocin, 2 mM L-glutamine.
**Preservation Medium:** DMEM, 4.5 g/l glucose, 20% (v/v)fetal bovine serum, 50 U/ml penicillin, 50 mg/ml streptomycin, 100 mg/ml Normocin, 2 mM L-glutamine, 10% (v/v) DMSO**.**
**Subculture Routine:** 1- Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid. 2- Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% (v/v) ethanol.
*Note: All steps from this point should be carried out under strict aseptic conditions.*
3- Transfer cells in a larger vial containing 15 ml of pre-warmed Growth Medium. do not add selective antibiotics until the cells have been passaged twice.4- Centrifuge vial at 1000-1200

RPM (RCF 200-300 g) for 5 minutes. 5- Remove supernatant containing the cryoprotective agent and resuspend cells with 1 ml of Growth Medium without selective antibiotics. 6- Transfer the vial contents to a 25 $cm^2$ tissue culture flask containing 5 ml of Growth Medium without selective antibiotics. 7- Place the culture at 37°C in 5% $CO_2$.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-
**ECACC Number:** -
**Reference:** -
**Viability:** 93%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C634
**Designation:** HEK293-Blue-hTLR5
**Species:** Human
**Tissue:** Embryonic kidney
**Morphology:** Epithelial like (semi-adherent)
**Description:** HEK-Blue-hTLR5 Cells are designed for studying the stimulation of human TLR5 by monitoring the activation of NF-kB. HEK-Blue™-hTLR5 Cells were obtained by co-transfection of the hTLR5 gene and an optimized secreted embryonic alkaline phosphatase (SEAP) reporter gene into HEK293 cells. The SEAP reporter gene is placed under the control of an NF-kB and AP-1-inducible promoter. Stimulation with a TLR5 ligand activates NF-kB and AP-1 which induce the production of SEAP. Levels of SEAP can be easily determined with QUANTI-Blue™ a detection medium that turns purple/blue in the presence of alkaline phosphatase. Alternatively,.HEK-Blue™ Detection, a cell culture medium that allows for real-time detection of SEAP can be used. HEK293 cells express endogenous levels of TLR3, TLR5 and NOD1. *Note: The parental cell line for HEK-Blue™-hTLR5 cells is HEK-Blue™-Null1 cells (SEAP reporter cells; expression levels of hTLR5 are 100-fold lower than in HEK-Blue™-hTLR5 Cells).*TLR5 recognizes flagellin from both Gram-positive and Gram-negative bacteria. Activation of the receptor stimulates the production of proinflammatory cytokines, such as TNF-α through signaling via the adaptor protein MyD88 and the serine kinase IRAK. TLR5 can generate a proinflammatory signal as a homodimer suggesting that it might be the only TLR participating in flagellin recognition. However, TLR5 may require the presence of a co-receptor or adaptor molecule for efficient ligand recognition and/or signaling**.**
HEK-Blue™-hTLR5 Cells should not be passaged more than 20 times to remain fully efficient. HEK-Blue™-hTLR5 Cells should be maintained in Growth Medium as described below in the presence of Blasticidin (30 ug/ml) and Zeocin (100 ug/ml). Antibiotic pressure with Blasticidin is required to maintain the plasmid coding for hTLR5, and Zeocin is required to maintain the plasmid coding for SEAP.

**Culture Medium:** DMEM, 4.5 g/l glucose, 10% (v/v) fetal bovine serum, 50 U/ml penicillin, 50 µg/ml streptomycin, 100 µg/ml Normocin, 2 mM L-glutamine.
**Preservation Medium:** DMEM, 4.5 g/l glucose, 20% (v/v)fetal bovine serum, 50 U/ml penicillin, 50 mg/ml streptomycin, 100 mg/ml Normocin, 2 mM L-glutamine, 10% (v/v) DMSO.
**Subculture Routine:** 1- Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid. 2- Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% (v/v) ethanol.
*Note: All steps from this point should be carried out under strict aseptic conditions.*
3- Transfer cells in a larger vial containing 15 ml of pre-warmed Growth Medium. do not add selective antibiotics until the cells have been passaged twice.4- Centrifuge vial at 1000-1200 RPM (RCF 200-300 g) for 5 minutes. 5- Remove supernatant containing the cryoprotective agent and resuspend cells with 1 ml of Growth Medium without selective antibiotics. 6- Transfer the vial contents to a 25 $cm^2$ tissue culture flask containing 5 ml of Growth Medium without selective antibiotics. 7- Place the culture at 37°C in 5% $CO_2$.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-
**ECACC Number:** -
**Reference:** 1. Gewirtz At. et al, 2001. Cutting edge: bacterial flagellin activates basolaterally expressed TLR5 to induce epithelial proinflammatory gene expression. J Immunol, 167(4):1882-5.
2. Hayashi f. et al, 2001.The innate immune response to bacterial flagellin is mediated by Toll-like receptor 5. Nature, 410(6832):1099-103.
3. tallant t. et al, 2004.Flagellin acting via TLR5 is the major activator of key signaling pathways leading to NF- kappa B and proinflammatory gene program activation in intestinal epithelial cells. BMC Microbiol. 4(1):33.
**Viability:** 97%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C635
**Designation:** HEK-Blue-Null-1
**Species:** Human
**Tissue:** Embryonic kidney
**Morphology:** Epithelial like (semi-adherent)
**Description:** HEK-Blue Null1 cells express the SEAP reporter gene under the control of the IFN-β minimal promoter fused to five NF-kB and AP-1 binding sites. This cell line is the parental cell line of HEK-Blue TLR2, TLR3, TLR5, TLR8, TLR9 and NOD1 cells. Levels of SEAP can be easily determined with QUANTI-Blue a detection medium that turns purple/blue

in the presence of alkaline phosphatase. HEK293 cells express endogenous levels of TLR3, TLR5 and NOD1.
Null1 Cells should not be passaged more than 20 times to remain fully efficient. HEK-Blue Null1 Cells should be maintained in Growth Medium as described below in the presence of Zeocin (100 ug/ml). Antibiotic pressure with Zeocin is required to maintain the plasmid coding for SEAP.
**Culture Medium:** DMEM, 4.5 g/l glucose, 10% (v/v) fetal bovine serum, 50 U/ml penicillin, 50 µg/ml streptomycin, 100 µg/ml Normocin, 2 mM L-glutamine.
**Preservation Medium:** DMEM, 4.5 g/l glucose, 20% (v/v)fetal bovine serum, 50 U/ml penicillin, 50 mg/ml streptomycin, 100 mg/ml Normocin, 2 mM L-glutamine, 10% (v/v) DMSO**.**
**Subculture Routine:** 1- Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid. 2- Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% (v/v) ethanol.
*Note: All steps from this point should be carried out under strict aseptic conditions.*
3- Transfer cells in a larger vial containing 15 ml of pre-warmed Growth Medium. do not add selective antibiotics until the cells have been passaged twice.4- Centrifuge vial at 1000-1200 RPM (RCF 200-300 g) for 5 minutes. 5- Remove supernatant containing the cryoprotective agent and resuspend cells with 1 ml of Growth Medium without selective antibiotics. 6- Transfer the vial contents to a 25 $cm^2$ tissue culture flask containing 5 ml of Growth Medium without selective antibiotics. 7- Place the culture at 37°C in 5% $CO_2$.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-
**ECACC Number:** -
**Reference:** -
**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C636
**Designation:** HEK-Blue-Null-2
**Species:** Human
**Tissue:** Embryonic kidney
**Morphology:** Epithelial like (semi-adherent)
**Description:** HEK-Blue Null2 cells express the SEAPreporter gene under the control of the IL-12 p40 minimal promoter fused to five NF-kB and AP-1 binding sites. This cell line is the parental cell line of HEK-Blue mTLR2, hTLR4, and h/mNOD2 cells.Levels of SEAP can be easily determined with QUANTI-Blue a detection medium that turns purple/blue in the

presence of alkaline phosphatase. HEK293 cells express endogenous levels of TLR3, TLR5 and NOD1.
HEK-Blue Null2 Cells should not be passaged more than 20 times to remain fully efficient. HEK-Blue Null2 Cells should be maintained in Growth Medium as described below in the presence of Zeocin (100 ug/ml). Antibiotic pressure with Zeocin is required to maintain the plasmid coding for SEAP.
**Culture Medium:** DMEM, 4.5 g/l glucose, 10% (v/v) fetal bovine serum, 50 U/ml penicillin, 50 µg/ml streptomycin, 100 µg/ml Normocin, 2 mM L-glutamine.
**Preservation Medium:** DMEM, 4.5 g/l glucose, 20% (v/v)fetal bovine serum, 50 U/ml penicillin, 50 mg/ml streptomycin, 100 mg/ml Normocin, 2 mM L-glutamine, 10% (v/v) DMSO**.**
**Subculture Routine:** 1- Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid. 2- Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% (v/v) ethanol.
*Note: All steps from this point should be carried out under strict aseptic conditions.*
3- Transfer cells in a larger vial containing 15 ml of pre-warmed Growth Medium. do not add selective antibiotics until the cells have been passaged twice.4- Centrifuge vial at 1000-1200 RPM (RCF 200-300 g) for 5 minutes. 5- Remove supernatant containing the cryoprotective agent and resuspend cells with 1 ml of Growth Medium without selective antibiotics. 6- Transfer the vial contents to a 25 $cm^2$ tissue culture flask containing 5 ml of Growth Medium without selective antibiotics. 7- Place the culture at 37°C in 5% $CO_2$.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-
**ECACC Number:** -
**Reference:** -
**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C637
**Designation:** KDI/20
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** The Pgp expressing cell line was established from a parental K562 (Erythroleukemia) cell line with increasing concentrations of doxorubicin and named KDI/20. This cell line is resistant to most of anticancer drugs.
**Culture Medium:** RPMI+ 10%FBS+ 20 ng/ml Doxorubicin
**Preservation Medium:** FBS + 10% DMSO

**Subculture Routine:** Maintain at 0.1-0.5 * $10^6$ cells/ml; split 1:3 to 1:5 every 3 days.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number: -**
**ECACC Number:** -
**Reference:** Hematology, October 2007; 12(5): 393-401.
**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C638
**Designation:** SW 872
**Species:** Human
**Tissue:** Connective tissue
**Morphology:** Fibroblast
**Description:** The SW 872 cell line was initiated by A. Leibovitz in 1974 at the Scott and White Clinic, Temple, Texas from a surgical specimen of a fibrosarcoma removed from a 36 year old male Caucasian.The histopathology evaluation reported an undifferentiated malignant tumor consistent with liposarcoma.
**Culture Medium:** RPMI + 10% Foetal Bovine Serum (FBS).
**Preservation Medium:** FBS+ 10% (v/v) DMSO.
**Subculture Routine:** Remove and discard culture medium**.** Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor**.** Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal**.** Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting**.** Add appropriate aliquots of the cell suspension to new culture vessels. Incubate cultures at 37°C**.**
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** HTB-92™
**ECACC Number:**-
**Reference:** Fogh J, et al. Absence of HeLa cell contamination in 169 cell lines derived from human tumors. J. Natl. Cancer Inst. 58: 209-214, 1977. Fogh J, et al. One hundred and twenty-seven cultured human tumor cell lines producing tumors in nude mice. J. Natl. Cancer Inst. 59: 221-226, 1977. Hu M, et al. Purification and characterization of human lung fibroblast motility-stimulating factor for human soft tissue sarcoma cells: identification as an NH2-terminal fragment of human fibronectin. Cancer Res. 57: 3577-3584, 1997.
**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the

information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C639
**Designation:** RAW 264.7
**Species:** Mouse
**Tissue:** Hematopoietic
**Morphology:** monocyte/macrophage - Semi-adherent
**Description:** Established from an ascites of a tumour induced in a male mouse by intraperitoneal injection of Abelson Leukaemia Virus (A-MuLV). Cells will pinocytose neutral red and phagocytose zymosan. Cells capable of antibody dependent lysis of sheep erythrocytes and tumour targets. Growth inhibited by LPS.
**Culture Medium:** DMEM + 2mM Glutamine + 10% Foetal Bovine Serum (FBS).
**Preservation Medium:** FBS+ 5% (v/v) DMSO.
**Subculture Routine:** Split sub-confluent cultures (70-80%) 1:2 to 1:8 i.e. seeding at 2-4*10,000 cells/cm²; 5% CO2; 37°C. Remove the cells mechanically (by scraping). Cells are semi-adherent, i.e. some cells grow in suspension, some loosely attach to the surface and others flattened out and attached to the flask. Cells should not be allowed to overgrow and become confluent as this can lead to loss of the flattened adherent cell characteristic. A subcultivation ratio of 1:3 to 1:6 is recommended. Replace or add medium every 2 to 3 days.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** TIB-71™
**ECACC Number:** 91062702
**Reference:** J Immunol 1977;119:950; Cell 1978;15:261**.** Hartley JW, et al. Expression of infectious murine leukemia viruses by RAW264.7 cells, a potential complication for studies with a widely used mouse macrophage cell line. Retrovirology. 4: 5:1, 2008.
**Viability:** 97%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C640
**Designation:** KATO III
**Species:** Human
**Tissue:** gastric carcinoma; stomach
**Morphology:** Spherical with attached epithelial cells
**Description:** Derived from metastatic site: pleural effusion; supraclavicular and axillary lymph nodes and Douglas cul-de-sac. Asian male**,** 55 years.
**Culture Medium:** RPMI 1640 + 2mM Glutamine + 20% Foetal Bovine Serum (FBS).
**Preservation Medium:** FBS+ 7% (v/v) DMSO.

**Subculture Routine:** Maintain cultures between 2-9x100,000 cells/ml; 5% CO2; 37°C. Cells grow in suspension, but will increasingly to adhere to the surface during longer culture. For passaging it is recommended to subculture both cell types using scrapers for dislodging adherent cells.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** HTB-103™
**ECACC Number:** 86093004
**Reference:** Sekiguchi M, et al. Establishment of cultured cell lines derived from a human gastric carcinoma. Jpn J Exp Med 48: 61-68, 1978.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C641
**Designation:** EA.hy926
**Species:** Human
**Tissue:** Somatic cell hybrid
**Morphology:** Endothelial , adherent.
**Description:** The human umbilical vein cell line, EA.hy926, was established by fusing primary human umbilical vein cells with a thioguanine-resistant clone of A549 by exposure to polyethylene glycol (PEG). Hybrid clones were selected in HAT medium and screened for factor VIII-related antigen. Antigen Expression: Factor VIII-related antigen; Homo sapiens, expressed . Drug resistance: Thioguanine resistant.
**Culture Medium:** Dulbecco's Modified Eagle's Medium + 10% fetal bovine serum (FBS).
**Preservation Medium:** FBS+ 7 % (v/v) DMSO.
**Subculture Routine:** 0.25% trypsin or trypsin/EDTA, 5% CO2, 37`C.To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. Interval: Twice a week.Subcultivation Ratio: A subcultivation ratio of 1:6 to 1:10 is recommended.Medium Renewal: Every 2 to 3 days.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2922™
**ECACC Number:** -
**Reference:** Edgell CJ, et al. Permanent cell line expressing human factor VIII-related antigen established by hybridization. Proc. Natl. Acad. Sci. USA 80: 3734-3737, 1983. Bauer J, et al. In vitro model of angiogenesis using a human endothelium-derived permanent cell line: contributions of induced gene expression, G-proteins, and integrins. J. Cell. Physiol. 153: 437-449, 1992.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide

sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C642
**Designation:** Reh 6
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** A lymphoid cell line, Reh 6, has been established from the peripheral blood of a pation with acute lymphocytic leukemia. Reh 6 cells were assayed for the presence of Epstein-Barr virus (EBV) DNA by nucleic acid hybridization and for Epstein-Barr nuclear antigen (EBNA) by the immunofluorescence test. Reassociation kinetics between in vitro [3H]-labeled EBV DNA and Reh 6 cell DNA indicated the absence of detectable amounts of EBV DNA in Reh 6 cell DNA. In addition, attempts to detect EBNA by the immunofluorescence test in Reh 6 cells were unsuccessful. Thus, this new lymphoid cell line apparently lacks the EBV genome.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS+ 7% (v/v) DMSO.
**Subculture Routine:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37°C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** -
**Reference:** Kayibanda B., Rosenfeld C., Goutner A., Bornkamm G.W., A New Lymphoid Cell Line, Reh 6, with Characteristics of Non-T and Non-B Cells, Lacking the Epstein-Barr Virus Genome and Derived from Human Acute Lymphoblastic Leukemia, Intervirology 1978;9:316–320.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C643
**Designation:** KPL-1
**Species:** Human
**Tissue:** Breast
**Morphology:** Adherent growing in monolayers (very dense colonies).
**Description:** KPL-1 was established from the pleural fluid of a 50-year-old Japanese woman with ductal carcinoma of the breast with a predominant intraductal component in 1992; cells were described to express estrogen, but not progesteron receptors and to secrete tissue

polypeptide antigen; however, DNA fingerprinting analysis at the DSMZ showed cross-contamination with cell line MCF-7; MCF-7 was established from the pleural effusion of a 69-year-old Caucasian woman with metastatic mammary carcinoma
**Culture Medium:** DMEM + 10% FBS.
**Preservation Medium:** FBS+ 10% (v/v) DMSO.
**Subculture Routine:** split confluent culture 1:8 to 1:10 once a week using trypsin/EDTA; seed out at ca. 1-2 x $10^6$ cells/80 $cm^2$, 10% CO2, 37°C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** DSMZ no.: ACC 317
**Reference:** Kurebayashi, J., Kurosumi, M., Sonoo, H. (1995). A new human breast cancer cell line, KPL-1 secretes tumour-associated antigens and grows rapidly in female athymic nude mice. *British journal of cancer* 71 ( 4 ): 845-853 .
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C644
**Designation:** CHO-K1
**Species:** Hamster
**Tissue:** Ovary
**Morphology:** Epithelial like
**Description:** The CHO-K1 cell line was derived as a subclone from the parental CHO cell line initiated from a biopsy of an ovary of an adult Chinese hamster**.** This cell line is suitable as a transfection host. Cells require proline due to the absence of the gene for proline synthesis, the block in the biosynthetic chain lies in the step converting glutamic acid to glutamine gamma serialdehyde. They undergo morphological changes in response to cholera toxin.
**Culture Medium:** Ham's F12 + 2mM Glutamine + 10% Foetal Bovine Serum (FBS).
**Preservation Medium:** FBS+ 5% (v/v) DMSO. liquid nitrogen vapor phase.
**Subculture Routine:** Split sub-confluent cultures (70-80%) 1:4 to 1:10 i.e. seeding at 1-2x10,000 cells/$cm^2$ using 0.25% trypsin or trypsin/EDTA; 5% $CO_2$; 37°C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-61™
**ECACC Number:** -
**Reference:** J Exp Med 1958; 108:945Proc Nat Acad Sci USA 1968; 60:1275**.**
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C645
**Designation:** HDF
**Species:** Human
**Tissue:** Dermal
**Morphology:** Fibroblasts
**Description:** Human Dermal Fibroblasts (HDF) are derived from the dermis of normal human neonatal foreskin. They are cryopreserved at the end of primary culture and can be cultured and propagated at least 16 population doublings. Fibroblasts are found in all connective tissues, and they synthesize and secrete extracellular matrix proteins under cell culture conditions. They are a well established system for in vitro analysis of fibroblast growth, migration and collagen metabolism in wound healing. Fibroblasts grown in a biodegradable mesh have been used as a living dermal replacement.
**Culture Medium:** DMEM + 10% FBS.
**Preservation Medium:** FBS+ 10% (v/v) DMSO.
**Subculture Routine:** Cell passage number less than 10 is safe and cytogenetic instability may occur in more passage number. Not more than 5 minutes in contact with trypsin. 0.25% trypsin/EDTA, 5% $CO_2$, 37°C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** -
**Reference:** 1.Hedman, K. et al, J. Cell Biol. 81:83 (1979). 2.Gay, S. et al, Proc. Natl. Acad. Sci. 73:4037 (1976). 3.Booth, A.B. et al, Biochem. Biophys. Acta 607:145 (1980). 4.Peterkofsky, B. et al, Proc. Natl. Acad. Sci. 53:335 (1965). 5.Hausmann, E., Biochem. Biophys. Acta 133:591 (1967). 6.Hansborough, J.F. et al, Surgery 111(4):438 (1991). 7.Cooper, M.L. et al, Biomaterials 12:243 (1991). Characterization: Positive for fibroblast surface protein.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C646
**Designation:** MV 1 LU
**Species:** Mink
**Tissue:** Lung
**Morphology:** Epithelial like
**Description:** This cell line is a suitable transfection host and is useful for focus forming assays for murine and feline sarcoma viruses.

**Culture Medium:** RPMI + 10% FBS.
**Preservation Medium:** FBS+ 5% (v/v) DMSO.
**Subculture Routine:** A subcultivation ratio of 1:3 to 1:4 is recommended, Medium Renewal: Every 2 to 3 days, 5% CO2, 37°C.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-64
**ECACC Number:** -
**Reference:** J. Virol. 70: 6884-6891, 1996, J. Biol. Chem. 271: 13123-13129, 1996.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C647
**Designation:** HCC1954
**Species:** Human
**Tissue:** Mammary gland; breast/duct
**Morphology:** large epithelial cells with occasional vacuoles
**Description:** HCC1954 was derived from a primary stage IIA, grade 3 invasive ductal carcinoma with no lymph node metastases.The HCC1954 is a poorly differentiated cell line initiated on October 30, 1995; it took about 4 months to establish. Clinical Data :61 years adult. East Indian,female. Receptor Expression: estrogen receptor, not expressed,progesterone receptor, not expressed. Oncogene: her2/neu + (overexpressed). Genes Expressed: Epithelial glycoprotein 2 [EGP2]; cytokeratin 19. Cellular Products: Epithelial glycoprotein 2 [EGP2]; cytokeratin 19.

**Culture Medium:** RPMI + 10% FBS.
**Preservation Medium:** Complete growth medium 95%; DMSO 5%
**Subculture Routine:** Volumes used in this protocol are for 75 $cm^2$ flask; proportionally reduce or increase amount of dissociation medium for culture vessels of other sizes. Remove and discard culture medium.Briefly rinse the cell layer with 0.25% (w/v) Trypsin-0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor. Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes). Note**:** To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.

Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting.Add appropriate aliquots of the cell suspension to new culture vessels.Incubate cultures at 37°C.Subculture Ratio: 1:4 to 1:8 .Medium Renewal: 2 to 3 times a week.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2338™
**ECACC Number:-**
**Reference:** Gazdar AF, et al. Characterization of paired tumor and non-tumor cell lines established from patients with breast cancer. Int. J. Cancer 78: 766-774, 1998. PubMed
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C648
**Designation:** CF2Th CCR5 (R5T4)
**Species:** Canis familiaris (Dog)
**Tissue:** Thymus
**Morphology:**Thymocytes (adherent)
**Description:** The cells are cloned from CF2Th cell line and express approximately 0.5-1*$10^6$ human CCR5 per cell.
**Culture Medium:**DMEM +10% FBS +0.4 mg/ml G418 + 0.2 mg/ml Hygromycin B.
**Preservation Medium:** Complete growth medium 95%; DMSO, 5%
**Subculture Routine:** Split sub-confluent cultures (70-80%) 1:3 to 1:6 i.e. seeding at 2-5*10,000 cells/cm² using 0.25% trypsin; 0.02% EDTA: 5% CO2; 37°C. Subcultivation Ratio: A subcultivation ratio of 1:2 to 1:6 is recommended Medium Renewal: 2 to 3 times per week.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-
**ECACC Number: -**
**Reference:** -
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C649
**Designation:** CF2Th CXCR4 (X4T4)
**Species:** Canis familiaris (Dog)
**Tissue:** Thymus (adherent)

**Morphology:** Thymocytes
**Description:** The cells are cloned from CF2Th cell line and express CXCR4.
**Culture Medium:** DMEM +10% FBS +0.4 mg/ml G418.
**Preservation Medium:** Complete growth medium 95%; DMSO, 5%.
**Subculture Routine:** Split sub-confluent cultures (70-80%) 1:3 to 1:6 i.e. seeding at 2-5*10,000 cells/cm² using 0.25% trypsin; 0.02% EDTA: 5% CO2; 37°C. Subcultivation Ratio: A subcultivation ratio of 1:2 to 1:6 is recommended Medium Renewal: 2 to 3 times per week.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-
**ECACC Number:-**
**Reference:-**
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C650
**Designation:** T98G
**Species:** Human
**Tissue:** Brain
**Morphology:** fibroblast
**Description:** Derived from glioblastoma multiform tumour from a 61-year-old Caucasian male. Indefinite lifespan and anchorage independent but can enter viable G1 arrested state when deprived of serum.
**Culture Medium:** EMEM (EBSS) + 2mM Glutamine + 1% Non Essential Amino Acids (NEAA) + 1% Sodium Pyruvate (NaP) + 10% Foetal Bovine Serum (FBS).
**Preservation Medium:** Complete growth medium 95%; DMSO, 5%.
**Subculture Routine:** Split sub-confluent cultures (70-80%) 1:3 to 1:6 i.e. seeding at 2-4x10,000 cells/cm² using 0.25% trypsin/EDTA; 5% CO2; 37°C. Cells may become anchorage-independent if deprived of serum.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-1690™
**ECACC Number:** 92090213
**Reference:** J Cell Physiol 1979;99:43.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C651
**Designation:** JIMT-1
**Species:** Human
**Tissue:** Breast
**Morphology:** Epithelial-like cells growing in monolayers
**Description:** Established from the pleural effusion of a 62-year-old woman with ductal breast cancer (grade 3 invasive, T2N1M0) after postoperative radiation in 2003; cell line was described to carry an amplified HER-2 oncogene and to be insensitive to HER-2-inhibiting drugs, e.g. trastuzumab (Herceptin)

**Culture Medium:** 90% Dulbecco's MEM + 10% FBS
**Preservation Medium:** frozen with 70% medium, 20% FBS, 10% DMSO
**Subculture Routine:** Split confluent culture 1:2 to 1:8 every 2-4 days using trypsin/EDTA; seed out at ca. 1 x $10^6$ cells/80 $cm^2$. Incubation: at 37 °C with 5% $CO_2$. Doubling time: 30-40 hours.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-
**ECACC Number:** DSMZ no.: ACC 589
**Reference:** Tanner, M., Kapanen, A. I., Junttila, T., Raheem, O., Grenman, S., Elo, J., Elenius, K., Isola, J. (2004). Characterization of a novel cell line established from a patient with Herceptin-resistant breast cancer. *Molecular cancer therapeutics* **3** ( 12 ): 1585-1592 .
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:**C652
**Designation:** SK-MEL-37
**Species:** Human
**Tissue:** Skin
**Morphology:** Epithelial-like
**Description:** Human malignant melanoma cell line from skin. This cell line is a suitable transfection host. 4 mutations were reported in COSMIC
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 5% DMSO.
**Subculture Routine:** Remove and discard culture medium. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains

trypsin inhibitor. Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed. Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting. Add appropriate aliquots of the cell suspension to new culture vessels. Incubate cultures at 37°C. Subcultivation Ratio: A subcultivation ratio of 1:3 to 1:8 is recommended**.** Medium Renewal: 2 to 3 times per week.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**-
**ECACC Number: -**
**Reference:** Biochemical and Biophysical Research Communications 289, 44–50 (2001).

**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C653
**Designation:** IMR-32
**Species:** Human
**Tissue:** Brain; derived from metastatic site: abdominal mass
**Morphology:** fibroblast; neuroblast
**Description:** The IMR-32 cell line was established by W.W. Nichols, J. Lee and S. Dwight in April, 1967 from an abdominal mass occurring in a 13-month-old Caucasian male. The tumor was diagnosed as a neuroblastoma with rare areas of organoid differentiation.This cell line is a suitable transfection host.
**Culture Medium:** RPMI + 10% FBS.
**Preservation Medium:** FBS + 5% DMSO.
**Subculture Routine:** Volumes used in this protocol are for 75 cm2 flasks; proportionally reduce or increase amount of dissociation medium for culture vessels of other sizes.Remove and discard culture medium.Briefly rinse the cell layer with 0.25% (w/v) Trypsin-0.53mM EDTA solution to remove all traces of serum which contains trypsin inhibitor.Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting. Add appropriate aliquots of the cell suspension to new culture vessels. Maintain cultures at a cell concentration between 4x104 and 4 x 105 cells/cm2.Incubate cultures at 37°C.
Subcultivation Ratio: A subcultivation ratio of 1:3 to 1:6 is recommended
Medium Renewal: Every 2 to 3 days

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-127™
**ECACC Number:** 86041809
**Reference:** Tumilowicz JJ, et al. Definition of a continuous human cell line derived from neuroblastoma. Cancer Res. 30: 2110-2118, 1970. PubMed: 5459762
Rostomily RC, et al. Expression of neurogenic basic helix-loop-helix genes in primitive neuroectodermal tumors. Cancer Res. 57: 3526-3531, 1997. PubMed: 9270024
Maestrini E, et al. A family of transmembrane proteins with homology to the MET-hepatocyte growth factor receptor. Proc. Natl. Acad. Sci. USA 93: 674-678, 1996. PubMed: 8570614
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C654
**Designation:** SK-N-AS
**Species:** Human
**Tissue:** Brain; Derived From Metastatic Site: Bone Marrow
**Morphology:** Epithelial
**Description:** Derivation: Bone marrow metastasis from a child with poorly differentiated embryonal neuroblastoma. Clinical Data: 6 years,Caucasian,female. Receptor Expression: insulin-like growth factor I (IGF-I), expressed. Tumorigenic: Yes. Effects: Yes, forms tumors in nude mice. Comments: SK-N-AS cells synthesize Insulin-like growth factor II (IFG-II) and IGF-II RNA and possess type I IGF receptors. Retinoic acid partially inhibits proliferation, and cells fail to differentiate. The cells exhibit low or no MDR1 expression.
**Culture Medium:** Dulbecco's Modified Eagle's Medium.To make the complete growth medium, add the following components to the base medium: O.1 mM Non-Essential Amino Acids (NEAA)+fetal bovine serum to a final concentration of 10%.
**Preservation Medium:** FBS + 5% DMSO.
**Subculture Routine:** Volumes used in this protocol are for 75 cm2 flask; proportionally reduce or increase amount of dissociation medium for culture vessels of other sizes.Remove and discard culture medium.Briefly rinse the cell layer with 0.25% (w/v) Trypsin-0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor.Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting.Add appropriate aliquots of the cell suspension to new culture vessels.Incubate cultures at 37°C.Subculture Ratio: 1:5 to 1:10.Medium Renewal: 2 to 3 times a week.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CRL-2137™
**ECACC Number:** 94092302

**Reference:** Sugimoto T, et al. Determination of cell surface membrane antigens common to both human neuroblastoma and leukemia-lymphoma cell lines by a panel of 38 monoclonal antibodies. J. Natl. Cancer Inst. 73: 51-57, 1984. PubMed: 6610792.Iavarone A, et al. Uptake and storage of m-iodobenzylguanidine are frequent neuronal functions of human neuroblastoma cell lines. Cancer Res. 53: 304-309, 1993. PubMed: 8417824 .Gaetano C, et al. Retinoic acid negatively regulates p34cdc2 expression during human neuroblastoma differentiation. Cell Growth Differ. 2: 487-493, 1991. PubMed: 1751405.El-Badry OM, et al. Autonomous growth of a human neuroblastoma cell line is mediated by insulin-like growth factor II. J. Clin. Invest. 84: 829-839, 1989. PubMed: 2547840.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C655
**Designation:** HTR-8
**Species:** Human
**Tissue:** placenta
**Morphology:** epithelial-like
**Description:** First trimester human trophoblast
**Culture Medium:** RPMI-1640+10%FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Volumes used in this protocol are for 75 $cm^2$ flasks; proportionally reduce or increase amount of dissociation medium for culture vessels of other sizes.Remove and discard culture medium. Briefly rinse the cell layer with $Ca^{++}/Mg^{++}$ free Dulbecco's phosphate-buffered saline (D-PBS) (ATCC 30-2200) or 0.25% (w/v) Trypsin - 0.53 mM EDTA (ATCC 30-2101) solution to remove all traces of serum which contains trypsin inhibitor.Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).**Note:** To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting.Transfer cell suspension to a centrifuge tube and spin at approximately 125 x g for 5 to 10 minutes. Discard supernatant. Resuspend the cell pellet in fresh growth medium.Add appropriate aliquots of the cell suspension to new culture vessels.Incubate cultures at 37°C.
**Subcultivation Ratio:** 1:3 to 1:8 is recommended.**Medium Renewal:** 2 to 3 times a week.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:**-
**Reference:** Graham CH, Hawley TS, Hawley RG, MacDougall JR, Kerbel RS, Khoo N, Lala PK. Exp Cell Res. Establishment and characterization of first trimester human trophoblast cells with extended lifespan. 1993 Jun;206(2):204-11.

Graham CH, Lysiak JJ, McCrae KR, Lala PK. Localization of transforming growth factor-beta at the human fetal-maternal interface: role in trophoblast growth and differentiation. Biol Reprod. 1992 Apr;46(4):561-72.

**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C656
**Designation:** BV-2
**Species:** mouse, C57BL/6
**Tissue:** brain, microglial cells
**Morphology:** semiadherent, morphology microglial. The cells grow loosely attached and in suspension.
**Description:** Transformed by: recombinant retrovirus (v-raf/v-mic). The BV-2 cells express the nuclear v-myc and the cytoplasmic v-raf oncogene products as well as the env gp70 antigen at the surface level; the BV-2 cells have morphological, phenotypical and functional markers of macrophages. Handle under Biosafety Level 2 containment. The BV-2 cell line produces an enveloped recombinant ecotropic retrovirus (capable of infecting murine cells only); such virus is known for its in vitro transforming ability and in vivo tumorigenic potential.
**Culture Medium:** RPMI 1640 + 10% FBS + 2mM L-Glutamine
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Split cultures 1:5-10; 37°C, 5% CO2

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** ICLC ATL03001
**Reference:** J Neuroimmunol 1990;27:229-237. Cell Immunol 1996;170:251-259.Infect Immunol 1992;60:3682-3688 .J Neuroimmunol 1991;34:53-60. J Neuroimmunol 1995;58:111-116 .J Neuroimmunol 1998;93:102-107.J Neurosci Res 1992;31:616-621.Neuroimmunol 1991;32:249-257.

**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C657
**Designation:** MC3T3-E1
**Species:** Mouse C57BL/6

**Tissue:** bone/calvaria
**Morphology:** fibroblast
**Description:** The osteoblastic cell line MC3T3-E1 has been established from a C57BL/6 mouse calvaria and selected on the basis of high alkaline phosphatase (ALP) activity in the resting state. Cells have the capacity to differentiate into osteoblasts and osteocytes and have been demonstrated to form calcified bone tissue in vitro. Mineral deposits have been identified as hydroxyapatite. Expression of basic fibroblast growth factor (bFGF) mRNA and protein has been shown to be regulated by treatment with TGF β and bFGF. Prostaglandin F2a has been reported to stimulate DNA synthesis and proliferation by up-regulation of insulin-like growth factor I receptors. MC3T3-E1 secrete collagen and express murine leukemia inhibitory factor (mLIF) in RNA.
MC3T3-E1 Cell Line has been used to study and propose an actin filament cytoskeleton analysis framework. It has also been used to study the effect of biodegradable magnesium and magnesium alloys on selected properties of these cells stimulated by direct cell/material interaction.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Split sub-confluent cultures (70-80%) seeding at 0.5 -2 x10,000 cells/cm² using 0.25% trypsin or trypsin/EDTA, 5% CO2, 37ºC.Never allow the culture to become fully confluent.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** 99072810
**Reference:** J Biol Chem 1994 269 9392, Biochem Biophys Res Commun 1991 175:577, J Biol Chem 1991 266:21044, J C.

**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C658
**Designation:** COLO 205
**Species:** Human
**Tissue:** colon; derived from metastatic site: ascites.
**Morphology:** epithelial, mixed, adherent and suspension. Round and refractile cells in suspension. Some cuboidal cells in the monolayer
**Description:** This l9ine was isolated in 1975 by T.U. Semple, et al. from ascitic fluid of a 70-year-old Caucasian male with carcinoma of the colon. The patient had been treated with 5-fluorouracil for 4-6 weeks before removal of the fluid specimen. Genes Expressed:

carcinoembryonic antigen (CEA) 1.5 to 4.1 ng/10 exp6 cells/10 days; keratin; interleukin 10 (IL-10, interleukin-10). The cells are positive for keratin by immunoperoxidase staining. Cellular Products: carcinoembryonic antigen (CEA) 1.5 to 4.1 ng/10 exp6 cells/10 days; keratin; interleukin 10 (IL-10, interleukin-10). Tumorigenic.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 5% DMSO.
**Subculture Routine:** Shake flask, retain the floating cells by transfering them into a centrifuge tube. Cells that remain attached may be removed using a standard trypsinization protocol (see below) and combined with the retained floating cells. Volumes used in this protocol are for 75 $cm^2$ flask; proportionally reduce or increase amount of dissociation medium for culture vessels of other sizes. Briefly rinse the cell layer with 0.25% (w/v) Trypsin-0.53 mM EDTA solution to remove all traces of serum which, contains trypsin inhibitor.Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 10 minutes). Note**:** To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting. Add appropriate the cell suspension to the centrifuge tube containing the floating cells. Centrifuge at 125 X g for 5 to 10 minutes. Resuspend in fresh medium and plate at the appropriate subcultivation ratio.Incubate cultures at 37°C.Subcultivation Ratio: A subcultivation ratio of 1:2 to 1:6 is recommended.Medium Renewal: Every 2 to 3 days.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** CCL-222™
**ECACC Number:** 87061208
**Reference:** Semple TU, et al. Tumor and lymphoid cell lines from a patient with carcinoma of the colon for a cytotoxicity model. Cancer Res. 38: 1345-1355, 1978. Gastl GA, et al. Interleukin-10 production by human carcinoma cell lines and its relationship to interleukin-6 expression. Int. J. Cancer 55: 96-101, 1993.Trainer DL, et al. Biological characterization and oncogene expression in human colorectal carcinoma cell lines. Int. J. Cancer 41: 287-296, 1988.Bjork P, et al. Isolation, partial characterization, and molecular cloning of a human colon adenocarcinoma cell-surface glycoprotein recognized by the C215 mouse monoclonal antibody. J. Biol. Chem. 268: 24232-24241, 1993.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C659
**Designation:** JY
**Species:** Human
**Tissue:** Blood

**Morphology:** Lymphoblastoid, Spherical, Suspension.
**Description:** An Epstein-Barr virus (EBV) transformed lymphoblastoid cell line with Human Leukocyte Antigen (HLA)-typing data available.
**Culture Medium:** RPMI 1640 + 2mM Glutamine + 10% Foetal Bovine Serum (FBS). To help establish a culture the concentration of FBS can be increased to 20%.
**Preservation Medium:** FBS + 5% DMSO.
**Subculture Routine:** When resuscitating from frozen, cells should be seeded at 0.5 x $10^6$ cells/ml in the culture medium. The culture should establish log phase growth after 3-5 days. When growing well dilute every 1-3 days to 3 x $10^5$ cells/ml. Maintain cultures between 3-9 x $10^5$ cells/ml for maximum growth; 5% $CO_2$; 37°C. Cells form floating aggregates of varying size.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** 94022533
**Reference:**
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C660
**Designation:** RAW Blue
**Species:** Mouse
**Tissue:** Hematopoietic
**Morphology:** monocyte/macrophage - Semi-adherent
**Description:** RAW-Blue™ cells are derived from RAW 264.7 macrophages. They stably express a secreted embryonic alkaline phosphatase (SEAP) gene inducible by NF-κB and AP-1 transcription factors. RAW-Blue™Cells express all TLRs (with the exception of TLR5) as well as RIG-I, MDA-5, NOD1 and NOD2; expression of TLR3 and NOD1 being very low. The presence of specific agonists of these receptors induces signaling pathways leading to the activation of NF-κB and AP-1. RAW-Blue™ cells can also be used as a Dectin-1 reporter cell line as they express high levels of endogenous Dectin-1. Stimulation of RAW-Blue™ cells with zymosan or heat-killed preparations of yeast induces the activation of NF-κB in a Dectin-1-dependent manner. Upon TLR, NOD or Dectin-1 stimulation, RAW-Blue™ cells activate NF-κB and/or AP-1 leading to the secretion of SEAP which is easily detectable and measurable when using QUANTI-Blue™, SEAP detection medium.RAW-Blue™ Cells are resistant to Zeocin™ and G418. Cells should be maintained in growth medium (described on the next page) supplemented with Zeocin™ only. Antibiotic pressure with Zeocin™ is required to maintain the plasmid coding for SEAP.
**Culture Medium:** RPMI + 10% FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Renew growth medium twice a week. Using a cell scraper, cells should be passaged when a 70-80% confluency is reached. Do not let the cells grow to 100%

confluency. Seeding density of 1.5 x $10^4$ cells per $cm^2$ .To ensure the best results, use RAW-Blue™ cells with less than 20 passages.
**Sterility:** Tests for bacteria and fungi were negative.
**ATCC Number: -**
**ECACC Number:** InvivoGen
**Reference:** https://www.invivogen.com/raw-blue
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C661
**Designation:** NCI-N87
**Species:** Human
**Tissue:** stomach; derived from metastatic site: liver
**Morphology:** epithelial - adherent
**Description:** gastric carcinoma – Male.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 5% DMSO.
**Subculture Routine:** Volumes are given for a 75 $cm^2$ flask. Increase or decrease the amount of dissociation medium needed proportionally for culture vessels of other sizes. Remove and discard culture medium.Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor.Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).**Note:** To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting.Add appropriate aliquots of the cell suspension to new culture vessels.Incubate cultures at 37°C.
**Subcultivation Ratio:** A subcultivation ratio of 1:3 to 1:4 is recommended
**Medium Renewal:** Two to three times weekly
**Note:** They grow as an adherent monolayer of tightly knit epithelial cells.
**Sterility:** Tests for bacteria and fungi were negative.
**ATCC Number:** CRL-5822
**ECACC Number: -**
**Reference:**

Park JG, et al. Characteristics of cell lines established from human gastric carcinoma. Cancer Res. 50: 2773-2780, 1990. PubMed: 2158397 .NCI-Navy Medical Oncology Branch Cell Line Supplement. J. Cell. Biochem. suppl. 24: 1996.

**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where

the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C662
**Designation:** Calu-3
**Species:** Human
**Tissue:** Lung adenocarcinoma; derived from metastatic site: pleural effusion
**Morphology:** epithelial- adherent
**Description:** adenocarcinoma- 25 years- male- Caucasian- The patient had received prior therapy with cytoxan, bleomycin and adriamycin.
**Culture Medium:** DMEM+10%FBS
**Preservation Medium:** FBS + 5% DMSO.
**Subculture Routine:** Remove and discard culture medium.Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor.Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).
Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting.Add appropriate aliquots of the cell suspension to new culture vessels. Corning® T-75 flasks (catalog #430641) are recommended for subculturing this product.Incubate cultures at 37°C.**Subcultivation Ratio:** A subcultivation ratio of 1:3 to 1:6 is recommended.**Medium Renewal:** 2 to 3 times per week.
**Sterility:** Tests for bacteria and fungi were negative.
**ATCC Number:** HTB-55
**ECACC Number:** -
**Reference:** Fogh J. Human tumor cells in vitro. New York: Plenum Press; 1975. Fogh J, et al. Absence of HeLa cell contamination in 169 cell lines derived from human tumors. J. Natl. Cancer Inst. 58: 209-214, 1977. PubMed: 833871.Goodfellow M, et al. One hundred and twenty-seven cultured human tumor cell lines producing tumors in nude mice. J. Natl. Cancer Inst. 59: 221-226, 1977. PubMed: 77210034.Fogh J. Cultivation, characterization, and identification of human tumor cells with emphasis on kidney, testis, and bladder tumors. Natl. Cancer Inst. Monogr. 49: 5-9, 1978. PubMed: 571047.Hay RJ, Caputo JL, Macy, ML, Eds. (1992) ATCC Quality Control Methods for Cell Lines. 2nd edition, Published by ATCC. Caputo JL. Biosafety procedures in cell culture. J. Tissue Culture Methods 11:223-227, 1988.Fleming, D.O., Richardson, J. H., Tulis, J.J. and Vesley, D., (1995) Laboratory Safety: Principles and Practice. Second edition, ASM press, Washington, DC. Biosafety in Microbiological and Biomedical Laboratories 4th ed.; U.S. Department of Health and Human Services ;1999.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the

information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C663
**Designation:** A2058
**Species:** Human
**Tissue:** skin; derived from metastatic site: lymph node
**Morphology:** epithelial- adherent
**Description:** melanoma- 43 years adult- male- Caucasian. This cell line is a suitable transfection host.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 5% DMSO.
**Subculture Routine:** Volumes are given for a 75 $cm^2$ flask. Increase or decrease the amount of dissociation medium needed proportionally for culture vessels of other sizes. Remove and discard culture medium.Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor.Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting.Add appropriate aliquots of the cell suspension to new culture vessels.Incubate cultures at 37°C.**Subcultivation Ratio:** A subcultivation ratio of 1:6 to 1:12 is recommended**Medium Renewal:** Every 2 to 3 days.
**Sterility:** Tests for bacteria and fungi were negative.
**ATCC Number:** CRL-11147
**ECACC Number:** 91100402
**Reference:** Fabricant RN, et al. Nerve growth factor receptors on human melanoma cells in culture. Proc. Natl. Acad. Sci. USA 74: 565-569, 1977. PubMed: 265522 .Sherwin SA, et al. Human melanoma cells have both nerve growth factor and nerve growth factor-specific receptors on their cell surfaces. Proc. Natl. Acad. Sci. USA 76: 1288-1292, 1979. PubMed: 375235 .Todaro GJ, et al. Transforming growth factors produced by certain human tumor cells: polypeptides that interact with epidermal growth factor receptors. Proc. Natl. Acad. Sci. USA 77: 5258-5262, 1980. PubMed: 6254071.Stetler-Stevenson WG, et al. The activation of human type IV collagenase proenzyme. Sequence identification of the major conversion product following organomercurial activation. J. Biol. Chem. 264: 1353-1356, 1989. PubMed: 2536363 .Stetler-Stevenson WG, et al. Tissue inhibitor of metalloproteinase (TIMP-2). A new member of the metalloproteinase inhibitor family. J. Biol. Chem. 264: 17374-17378, 1989. PubMed: 2793861.Tumors developed within 21 days at 100% frequency (5/5) in nude mice inoculated subcutaneously with 10(7) cell.
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C664
**Designation:** NETRA-2 cl.D1 [NT2/D1]
**Species:** Human
**Tissue:** testis (lung metastasis)
**Morphology:** epithelial-like,differentiation changes phenotype
**Description:** The pluripotent human embryonal carcinoma cell line NTERA-2 clone D1, also known as NT2/D1, is a subclone derived from the parent line NTERA-2. NTERA-2 cells were established from a nude mouse xenograft tumour of TERA-2 cells, which were originally isolated from a lung metastasis from a 22 year old patient with primary embryonal carcinoma of the testis. The subline NTERA-2 clone D1 differentiates into neuronal and other cell types in response to retinoic acid (RA) or hexamethylene bisacetamide (HMBA). Differentiated cells become permissive for human cytomegalovirus (HCMV) or human immunodeficiency virus (HIV). Differentiation with RA as inducer results in glycolipid changes, appearance of neurons and induction of Homeobox (HOX) gene clusters. When NTERA-2 clone D1 cells are passaged at high cell density EC-like cells predominate. However, when cultured at low density many large flat cells differing from typical EC cells are formed.
**Culture Medium:** DMEM + 10% FBS
**Preservation Medium:** FBS + 5% DMSO
**Subculture Routine:** Subcultures are prepared by scraping. Cells from confluent cultures (approximately 20 million cells per 75 $cm^2$) are dislodged from the flask surface, aspirated and dispensed into new flasks. Cultures should be maintained at high density. Seed new flasks at a density of at least 5 X $10^6$ viable cells per 75 $cm^2$ flask. Medium Renewal: Every 2 to 3 days 37°C.
**Sterility:** Tests for bacteria and fungi were negative.
**ATCC Number:** CRL-1973™
**ECACC Number:** 01071221
**Reference:** Dewji NN, Singer SJ. Cell surface expression of the Alzheimer disease-related presenilin proteins. Proc. Natl. Acad. Sci. USA 94: 9926-9931, 1997. PubMed: 9275228
Baldassarre G, et al. Transfection with a CRIPTO anti-sense plasmid suppresses endogenous CRIPTO expression and inhibits transformation in a human embryonal carcinoma cell line. Int. J. Cancer 66: 538-543, 1996. PubMed: 8635871
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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# Hybridoma Collection

**NCBI Code**: H101
**Designation:** OKT4
**Species:** Mouse
**Specificity:** Anti human helper T cell subset
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG2b
**Description:** The hybridoma was produced by the fusion of P3X63Ag8.653 mouse myeloma cells with splenocytes from CAF1 mice immunized with human peripheral blood T lymphocytes. Monoclonal antibody reactive to human helper T cell subset is produced.
**Culture Medium:** Iscove's DMEM + 20% FBS. This hybridoma was adapted to RPMI 1640 + 10% FBS in NCBI.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** CRL-8002
**Donor:** CAF1 mouse spleen cells
**Immunogen:** Human peripheral blood T lymphocytes
**Viability:** 66%, 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Proc Nat Acad Sci, USA 1980, 77:4914.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H102
**Designation:** OKT8
**Species:** Mouse
**Specificity:** Anti human CD8
**Myeloma:** P3X63Ag8
**Antibody Isotype:** IgG2a
**Description:** The Ab is directed against the CD8 Ag on human peripheral T cells of suppressor/cytotoxic subset.
**Culture Medium:** Iscove`s DMEM + 20% FBS. This hybridoma was adapted to RPMI 1640 + 10% FBS in NCBI.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** CRL-8014
**Donor:** CAF1 mouse spleen cells
**Immunogen:** Human peripheral blood T lymphocytes
**Viability:** 70%, 6 x 10^6 cells/vial

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Proc Nat Acad Sci, USA 1980, 77:4914; J Immunol 1980, 124:1301; Proc Nat Acad Sci, USA 1980, 77:1088.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H103
**Designation:** OKT10
**Species:** Mouse
**Specificity:** Anti human CD38
**Myeloma:** P3X63Ag8
**Antibody Isotype:** IgG1
**Description:** The Ab is directed against the CD38 antigen.
**Culture Medium:** Iscove`s DMEM + 20% FBS. This hybridoma was adapted to RPMI 1640 + 10% FBS in NCBI.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** CRL-8022
**Donor:** CAF1 mouse spleen cells
**Immunogen:** Human acute lymphoblastic leukemia cells
**Viability:** 86%, 1.7 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** US Patent 4,364,935 dated Dec 21 1982.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H104
**Designation:** OKT3
**Species:** Mouse
**Specificity:** Anti human CD3
**Myeloma:** P3X63Ag8
**Antibody Isotype:** IgG2a
**Description:** The Ab is directed against the CD3 Ag on human T cells.
**Culture Medium:** Iscove`s DMEM + 20% FBS. This hybridoma was adapted to RPMI 1640 + 10% FBS in NCBI.

**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** CRL-8001
**Donor:** CAF1 mouse spleen cells
**Immunogen:** Human peripheral blood lymphocytes
**Viability:** 94%, 4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Proc Nat Acad Sci, USA 1980, 77:4914.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H105
**Designation:** OKT11
**Species:** Mouse
**Specificity:** Anti human CD2
**Myeloma:** P3X63Ag8
**Antibody Isotype:** IgG1
**Description:** The Ab is directed against the CD2 Ag on human thymocytes and peripheral T lymphocytes.
**Culture Medium:** Iscove`s DMEM + 20% FBS. This hybridoma was adapted to RPMI 1640 + 10% FBS in NCBI.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** CRL-8027
**Donor:** CAF1 mouse spleen cells
**Immunogen:** Human acute lymphoblastic leukemia cells
**Viability:** 82%, 1.3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** US Patent 4,364,937 dated Dec 27 1982.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H106
**Designation:** 1D7
**Species:** Mouse

**Specificity:** Anti human CD32
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG2b
**Description:** The antibody is directed against the CD32 on human monocytic cell line U937.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** U937 monocytic cell line
**Viability:** 89%, 1.2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H107
**Designation:** 3C5
**Species:** Mouse
**Specificity:** Anti human CD33
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG2
**Description:** The antibody is directed against the CD33 on human T cells.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** U937 monocytic cell line
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Biol Chem 1995 270: 7799-7808.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H108
**Designation:** 6E3
**Species:** Mouse
**Specificity:** Anti human CD64

**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG2b
**Description:** The antibody is directed against the CD64 on human T cells.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** U937 monocytic cell line
**Viability:** 91%, 4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H109
**Designation:** 6C9
**Species:** Mouse
**Specificity:** Anti human CD15
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgM
**Description:** The antibody is directed against the CD15 on human T cells.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** U937 monocytic cell line
**Viability:** 94%, 2.2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H110
**Designation:** 4C4
**Species:** Rat
**Specificity:** Anti mouse CD1.1
**Myeloma:** Sp2/0-Ag14

**Antibody Isotype:** IgG2b
**Description:** The antibody blocks recognition of CD1.1 by some, but not all T cells.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-327
**Donor:** BALB/c mouse spleen cells
**Immunogen:** U937 monocytic cell line
**Viability:** 88%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Immunol 1998 160: 3121-3127. J Immunol 1998 160: 3128-3134. Immunol 1998 10: 391-398**.**
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H111
**Designation:** OKT6
**Species:** Mouse
**Specificity:** Anti human CD1a
**Myeloma:** P3X63/Ag8.653
**Antibody Isotype:** IgG1
**Description:** The hybridoma was produced by the fusion of P3X63/Ag8 mouse myeloma cells with splenocytes from CAF1 mice immunized with human acute lymphoblastic leukemia cells. Monoclonal antibody reactive to human common thymocytes, is produced. The antibody is directed against the CD1a Ag.
**Culture Medium:** Iscove's DMEM + 20% FBS. This hybridoma was adapted to RPMI 1640 + 10% FBS in NCBI.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** CRL-8020
**Donor:** CAF1 mouse spleen cells
**Immunogen:** Human acute lymphoblastic leukemia cells
**Viability:** 98%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** US Patent 4,364,933 dated Dec 21 1982.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** H113
**Designation:** 4SB3
**Species:** Mouse
**Specificity:** Anti human IFN gamma
**Myeloma:** P3X63Ag8
**Antibody Isotype:** IgG1
**Description:** This weakly neutralizing Ab reacts with natural human IFN gamma and cross-reacts with recombinant IFN gamma (non-glycosylated, E.Coli derived . There is no cross-reaction with IFN alpha or beta.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 92030610.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Human leucocyte-derived interferon gamma
**Viability:** 97%, 2.1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Interferon Res 1984, 4:619.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H114
**Designation:** BMAC-1
**Species:** Mouse
**Specificity:** Anti human CD45 determinant 2b
**Myeloma:** NSO
**Antibody Isotype:** IgG1
**Description:** The Ab recognizes the human leukocyte common Ag, determinant 2b (CD45 determinant 2b).
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C. These cells require mouse macrophage feeder layers upon resuscitation.
**ECACC Number:** 89062103.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Human thymocytes, followed by human T-lymphocytes
**Viability:** 97%, 4.4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Eur J Immunol 1986, 16:993.

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H115
**Designation:** BMAC-3
**Species:** Mouse
**Specificity:** Anti human CD45 determinant 2a
**Myeloma:** NSO
**Antibody Isotype:** IgG1
**Description:** The Ab recognizes the human leukocyte common Ag, determinant 2a (CD45 determinant 2a).
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C. These cells reqiure mouse macrophage feeder layers upon resuscitation.
**ECACC Number:** 89062105.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Purified leukocyte common antigen from the Daudi cell line
**Viability:** 100%, 1.3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Eur J Immunol 1986, 16:993.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H116
**Designation:** 7R2/A4
**Species:** Mouse
**Specificity:** Anti human IFN gamma
**Myeloma:** P3X63Ag8
**Antibody Isotype:** IgG1
**Description:** This strongly neutralizing Ab is specific for human lymphocyte derived and recombinant forms of IFN gamma. There is no cross-reaction with IFN beta or alpha.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.

**ECACC Number:** 92030601.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Recombinant human IFN gamma (E.Coli derived, non glycosylated)
**Viability:** 98%, 1.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Lymphokines & Interferon: A practical approach, IRL Press, Oxford 1987, pp105.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H117
**Designation:** 357-101-4
**Species:** Mouse
**Specificity:** Anti human TNF alpha
**Myeloma:** NSO
**Antibody Isotype:** IgG1
**Description:** This strongly neutralizing Ab is specific for natural and recombinant human TNF alpha. It does cross-react with simian TNF alpha, but not with TNF alpha or beta of most other species. It can be used in a sandwich ELISA with 2-179-E11 (NCBI H128).
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 92030603.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Highly purified recombinant human TNF alpha
**Viability:** 99%, 1.8 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Hybridoma 1987, 6:305.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H118
**Designation:** DA6.231
**Species:** Mouse
**Specificity:** Anti human MHC class II beta chain
**Myeloma:** NS1

**Antibody Isotype:** IgG1
**Description:** The Ab is directed against the beta chain of human MHC class II Ags. It reacts with cell surface MHC Ags and cross reacts with MHC class II Ags of other species.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 90110606.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Daudi Burkitt's lymphoma cells
**Viability:** 100%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were nagative.
**Reference:** Eur J Immunol 1982, 12:942; Immunogenetics 1982, 16:459.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H119
**Designation:** F10-89-4
**Species:** Mouse
**Specificity:** Anti human CD45 determinant 1
**Myeloma:** NSI/1
**Antibody Isotype:** IgG2a
**Description:** The Ab recognizes the human leukocyte common Ag which is found on cells from spleen, lymph nodes, 83% of bone marrow cells and on granulocytes. The Ag recognized by F10-89-4 is a glycoprotein with a molecular weight of 190 to 215KD.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 2-5 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 89062101.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Human T lymphocytes
**Viability:** 88%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Eur J Immunol 1980, 10:737.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H120
**Designation:** Mycl-8F9
**Species:** Mouse
**Specificity:** Anti human c-myc gene product
**Myeloma:** SP2/0
**Antibody Isotype:** IgG1, Kappa
**Description:** The Ab recognizes the human p62c-myc gene product. It is specific for the peptide D sequence and cross-reacts with the p64/66 gene product of the mouse c-myc gene.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 85102204.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** A synthetic peptide, corresponding to residues 171-188 (peptide D) of human p62c-myc sequence, conjugated to keyhole limpet haemocyanin (KLH)
**Viability:** 94%, 3.1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Mol Cell Biol 1985, 5:3610.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H121
**Designation:** CT14-B2
**Species:** Mouse
**Specificity:** Anti human c-myc gene product
**Myeloma:** SP2/0
**Antibody Isotype:** IgG1, Kappa
**Description:** The Ab recognizes the 62KD protein which is the product of the human c-myc gene. There is no cross-reaction with the murine c-myc protein or the chicken p110gag-myc protein.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 85102205.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Synthetic peptides with sequence of the human p62c-myc gene product (amino acid residues 408-432)
**Viability:** 96%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Mol Cell Biol 1985, 5:3610.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were

obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H122
**Designation:** F8-11-13
**Species:** Mouse
**Specificity:** Anti human CD45R
**Myeloma:** NS1/1
**Antibody Isotype:** IgG1
**Description:** The Ab reacts with determinant expressed on subset of leucocyte common Ag (L-CA). The determinant is selectively expressed principally on LC molecules of B lymphocytes. Only small proporation of thymocytes are weakly positive and granulocytes are negative.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 2-5 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 89062102.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Fresh human lymph node lymphocytes depleted of B lymphocytes
**Viability:** 86%, 2.6 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Exp Med 1981, 153:753.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H123
**Designation:** NI 4 426/7A3-3
**Species:** Mouse
**Specificity:** Anti human IL-4
**Myeloma:** NSO
**Antibody Isotype:** IgG1
**Description:** This neutralizing Ab binds to all forms of human IL-4 tested, natural and recombinant.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 92030618.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Recombinant human interleukin-4

**Viability:** 96%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Cytokine 1991, 3:562.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H124
**Designation:** NI GM465/7A6-37
**Species:** Mouse
**Specificity:** Anti human GM-CSF
**Myeloma:** NSO
**Antibody Isotype:** IgG2a
**Description:** This neutralising Ab is specific for GM-CSF.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Human recombinant granulocyte macrophage cells
**Viability:** 99%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H125
**Designation:** OKT9
**Species:** Mouse
**Specificity:** Anti human CD71
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG1
**Description:** The Ab is directed against the transferrin receptor, CD71. The hybridoma was produced by the fusion of P3X63Ag8 mouse myeloma cells with splenocytes from CAF1 mice immunized with human acute lymphoblastic leukemia cells. Monoclonal antibody reactive to human activated T cells is produced.
**Culture Medium:** Iscove's DMEM + 20% FBS. This hybridoma was adapted to RPMI 1640 + 10% FBS in NCBI.

**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** CRL-8021
**Donor:** CAF1 mouse spleen cells
**Immunogen:** Human acute lymphoblastic leukemia cells
**Viability:** 94%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** US Patent 4,364,934 dated Dec 21 1982. Proc Natl Acad Sci 1981 78: 4515-4519.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H126
**Designation:** WM1
**Species:** Mouse
**Specificity:** Anti human C3
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG1, lambda
**Description:** The Ab is directed against human complement component 3. The Ab will bind to C3b and C3c, but not to C3a or C3d.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 92021211.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Human complement component 3
**Viability:** 99%, 3.4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Eur J Immunol 1981, 11:140.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H127
**Designation:** W6/32HL
**Species:** Mouse
**Specificity:** Anti HLA-A, B, C

**Myeloma:** NS1/1
**Antibody Isotype:** IgG2a
**Description:** The target Ag is a determinant on the 43KD polypeptide chains of HLA-A, B and C. The Ab is directed against human leukocytes.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 85102222.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Membrane from human tonsil cells
**Viability:** 91%, 5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Cell 1978, 14:9; Nature 1979, 2769:243.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H128
**Designation:** 2-179-E11
**Species:** Mouse
**Specificity:** Anti human TNF alpha
**Myeloma:** NSO
**Antibody Isotype:** IgG1
**Description:** This strongly neutralizing Ab reacts with natural & recombinant human TNF alpha. It does not cross-react with human TNF beta. It cross-reacts with simian TNF alpha but not with TNF alpha or beta of other species. It can be paired in a sandwich ELISA with 357-101-4 (NCBI H117).
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 92030602.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Highly purified recombinant human tumor necrosis factor alpha
**Viability:** 96%, 3.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Hybridoma 1987, 6:305.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** H130
**Designation:** 359-81-11
**Species:** Mouse
**Specificity:** Anti human TNF beta
**Myeloma:** NSO
**Antibody Isotype:** IgG1
**Description:** This strongly neutralizing Ab is specific for natural & recombinant forms of human TNF beta. It does not cross-react with human TNF alpha or TNF beta of most other species. It can be paired in sandwich ELISA for TNF beta with 359-238-8 (NCBI H128).
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ECACC Number:** 92030606.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Recombinant human tumor necrosis factor beta
**Viability:** 86%, 4.8 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Immunol Methods 1987, 104:31.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H131
**Designation:** T4-2
**Specificity:** Anti human CD4
**Description:** The Ab is directed against the CD4 Ag on human T cells.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 90%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H132
**Designation:** GAP-8-3
**Species:** Mouse
**Specificity:** Anti human granulocyte, lymphocyte and monocyte
**Myeloma:** SP2/0Ag14
**Antibody Isotype:** IgG2a kappa
**Description:** The hybrid cell line GAP-8-3 produces a monoclonal antibody that reacts with human lymphocytes, granulocytes and monocytes but not erythrocytes. Initial studies suggest that antibody detects a 200KD antigen analogous to the murine T-200 and rat leukocyte commom antigen.
**Culture Medium:** DMEM + 4.5 g/L Glucose + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-12
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Human T cell line Molt-4
**Viability:** 96%, 2.4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Immunol 1980, 124:533.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H133
**Designation:** P12
**Species:** Mouse
**Specificity:** Anti human placental membranes
**Myeloma:** NS/1 cells.
**Antibody Isotype:** IgM
**Description:** The P12 hybridoma secretes a mouse monoclonal antibody that reacts with a broad range of tissues, including teratocarcinomas. The P12 antigen is strongly expressed on fetal granulocytes, and is heat-stable, protease-resistant and associated with high molecular weight glycoproteins.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-8551
**Donor:** F1 mouse spleen cells
**Immunogen:** Membrane preparation from human placental tissue
**Viability:** 100%, 4.7 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference**: U.S. Patent Number 4,762,800
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were

obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H134
**Designation:** 4D11
**Species:** Rat
**Specificity:** Anti LGL-1 antigen on a subset of mouse NK cells
**Myeloma:** NS-1
**Antibody Isotype:** IgG2a
**Description:** The hybridoma cell line 4D11 secretes a rat monoclonal antibody that reacts with the LGL-1 antigen present on a subset of mouse NK cells. The line was produced by fusing NS-1 myeloma cells with spleen cells from Fischer 344 rats that had been immunized with C57BL/6 mouse liver-derived large granular lymphocytes in the presence of rat antiserum against NK cell-depleted C57BL/6 mouse spleen cells. The antibody detects a major (approximately 50%) subset of mouse NK cells. This subset (LGL-1+/NK-1.1+) functions in NK type lysis, but lacks LAK (Lymphokine activated killing) activity against P815 and L5178 Y tumor target cells. The antigen recognized by 4D11 appears to be non-polymorphic and is present in all mouse strains tested.
**Culture Medium:** RPMI 1640 + 0.05 2mM mercaptoethanol + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-240
**Donor:** Fischer 344 rat spleen cells
**Immunogen:** C57BL/6 mouse liver-derived large granular lymphocytes
**Viability:** 94%, 5.4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Immunol 1988, 140:4403; ibid 1990, 145:751.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H135
**Designation:** 33D1
**Species:** Rat
**Specificity:** Anti mouse dendritic cells
**Myeloma:** P3X63Ag8
**Antibody Isotype:** IgG2b
**Description:** The 33D1 hybridoma secretes a rat monoclonal antibody that reacts with mouse dendritic cells. The Ab is cytotoxic and does not appear to be directed against Ia or immue response-

associated antigen. The antigen appears to be present only on dendritic cells with an estimated frequency of 10,000 to 15,000 sites per cell.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** TIB--227
**Donor:** Sprague rat spleen cells
**Immunogen:** Mouse spleen and lymph node dendritic cells
**Viability:** 97%, 6 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Proc Nat Acad Sci, USA 1982, 79:161; J Exp Med 1983, 157:613.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H136
**Designation:** GL1
**Species:** Rat
**Specificity:** Anti mouse B7-2 antigen
**Myeloma:** SP2/0Ag14
**Antibody Isotype:** IgG2a
**Description:** The hybridoma GL1 secretes a rat monoclonal antibody that reacts with the mouse B7-2 lymphocyte antigen present on activated mouse B cells. The B7-2 antigen is a ligand for CTLA-4 (T cell activation molecule). B7-2 shows minimal expression on unstimulated B cells, but is expressed at high density on activated B cells. It is distinct from B7-1 (previously referred to as B7).
**Culture Medium:** RPMI 1640 + 1mM Sodium pyruvate + 1% NEAA + 50 micro M 2-mercoptoethanol + 10% FBS. This hybridoma was adapted to RPMI 1640 + 10% FBS in NCBI.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-253
**Donor:** Lewis rat spleen cells
**Immunogen:** LPS-activated DBA/2J mouse B cells
**Viability:** 95%, 2.3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Science 1993, 262:905; ibid 1993, 262:907; ibid 1993, 262:909.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** H137
**Designation:** 14-4-4S
**Species:** Mouse
**Specificity:** Anti I-Ek
**Myeloma:** SP2/0Ag14
**Antibody Isotype:** IgG2a, kappa
**Description:** The hybridoma 14-4-4S produces a cytotoxic monoclonal antibody that reacts with I-Ek determinants. This Ab exhibits broad cross-reactivity and recognizes H-2k, H-2d, H-2p and H-2r.
**Culture Medium:** DMEM + 10% FBS. This hybridoma was adapted to RPMI 1640 + 10% FBS in NCBI.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-32
**Donor:** C3H.SW mouse lymphocyte cells
**Immunogen:** C3H cells
**Viability:** 95%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Immunol 1980, 124:533.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H138
**Designation:** 3B7
**Species:** Mouse
**Specificity:** Anti 38-45KD surface Ag of Brucella abortus
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG1
**Description:** The antibody is directed against the 38-45KD surface Ag of Brucella abortus S(99). It does not cross react with any other bacteria. The antibody may be used for diagnostic and vaccine production purposes.
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Surface Ag of Brucella abortus
**Viability:** 88%, 1.1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were

obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H139
**Designation:** 1B6
**Species:** Mouse
**Specificity:** Anti 38-45KD surface Ag of Brucella abotrus
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG1
**Description:** The antibody is directed against the 38-45KD surface Ag of Brucella abortus S(99). It cross reacts with Brucella melitensis and Brucella suis. The antibody may be used for diagnostic and vaccine production purposes.
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Surface Ag of Brucella abortus
**Viability:** 91%, 1.4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H140
**Designation:** 1G5
**Species:** Mouse
**Specificity:** Anti 38-45KD surface Ag of Brucella abotrus
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG2b
**Description:** The antibody is directed against the 38-45KD surface Ag of Brucella abortus S(99). It cross reacts with Brucella melitensis and Brucella suis. The antibody may be used for diagnostic and vaccine production purposes.
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Surface Ag of Brucella abortus
**Viability:** 88%, 2 x 10^6 cells/vial

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H141
**Designation:** 4B6
**Species:** Mouse
**Specificity:** Anti Brucella abortus outer membrane proteins
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG2b
**Description:** The antibody is directed against the 25, 26 and 27KD outer membrane proteins of Brucella abortus S(99). It does not cross react with other bacteria. The antibody may be used for diagnostic and vaccine production purposes.
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Outer membrane proteins of Brucella abortus
**Viability:** 96%, 1.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H142
**Designation:** 4B7
**Species:** Mouse
**Specificity:** Anti Brucella abortus outer membrane proteins
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG1
**Description:** The antibody is directed against the 25, 26, 27 and 55.5KD outer membrane proteins of Brucella abortus S(99). It does not cross react with other bacteria. The antibody may be used for diagnostic and vaccine production purposes.
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.

**Donor:** BALB/c mouse spleen cells
**Immunogen:** Outer membrane proteins of Brucella abortus
**Viability:** 96%, 1.2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H143
**Designation:** 3G6
**Species:** Mouse
**Specificity:** Anti Brucella abortus 36KD outer membrane protein
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG1
**Description:** The antibody is directed against the 36KD outer membrane protein of Brucella abortus S(99). It does not cross react with other bacteria. The antibody may be used for diagnostic and vaccine production purposes.
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-12485**.**
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Outer membrane protein of Brucella abortus
**Viability:** 91%, 1.7 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** U.S. Patent Number 6,150,508.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H144
**Designation:** 9H7
**Species:** Mouse
**Specificity:** Anti Leishmanial soluble antigens
**Myeloma:** P3X63Ag8.655
**Description:** The antibody is directed against the Leishmania soluble antigen 48-49KD. It is a valuable tool in research on mircoorganisms.

**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** Leishmania 48-49KD Ag
**Viability:** 94%, 2.4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H145
**Designation:** 5C5
**Species:** Mouse
**Specificity:** Anti Leishmania GP63
**Myeloma:** P3X63Ag8.655
**Description:** The antibody is directed against the Leishmania native and truncated GP63 and it is a valuable tool in research on microorganisms.
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** GP63
**Viability:** 90%, 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H146
**Designation:** 4C8
**Species:** Mouse
**Specificity:** Anti Leishmania GP63
**Myeloma:** P3X63Ag8.655
**Antibody Isotype:** IgG2b
**Description:** The antibody is directed against the Leishmania native and truncated GP63 and it is a valuable tool in research on microorganisms.

**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** GP63
**Viability:** 85%, 1.2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H147
**Designation:** 1E11(E5)
**Species:** Mouse
**Specificity:** Anti 33KD PSA
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG2b
**Description:** The antibody is directed against the 33KD prostate specific antigen (PSA) as determined by Western blot. It reacts with all isoforms of PSA and with PSA in parafin fixed tissues. Considering PSA is regarded as a tumor marker for prostate malignancy, the antibody produced by this hybridoma has potential application for an ELISA based screening.
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** Mouse BALB/c spleen cells
**Immunogen:** PSA
**Viability:** 80%, 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H148
**Designation:** 4D1(G8)
**Species:** Mouse
**Specificity:** Anti 33KD PSA
**Myeloma:** P3X63Ag8.653

**Antibody Isotype:** IgG2b
**Description:** The antibody is directed against the 33KD prostate specific antigen (PSA) as determined by Western blot. It reacts with all isoforms of PSA and with PSA in parafin fixed tissues. Considering PSA is regarded as a tumor marker for prostate malignancy, the antibody produced by this hybridoma has potential application for an ELISA based screening.
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** PSA
**Viability:** 85%, 4.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H149
**Designation:** 1D2(D5)
**Species:** Mouse
**Specificity:** Anti 33KD PSA
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG1
**Description:** The antibody is directed against the 33KD prostate specific antigen (PSA) as determined by Western blot. It reacts with all isoforms of PSA and with PSA in parafin fixed tissues. Considering PSA is regarded as a tumor marker for proatste malignancy, the antibody produced by this hybridoma has potential application for an ELISA based screening.
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c mouse spleen cells
**Immunogen:** PSA
**Viability:** 80%, 4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H150
**Designation:** G28-5
**Species:** Mouse
**Specificity:** Anti human CD40
**Myeloma:** NS-1
**Antibody Isotype:** IgG1
**Description:** Animals were immunized with human tonsillar lymphocytes. Spleen cells were fused with NS-1 myeloma cells. The antibody is specific for the Bp50 (CD40) B cell surface antigen. The antibody reacts specifically with CD20 positive (Bp35, B1) blood and tonsillar B cells, and does not react with T cells or NK cells. It does react with malignant B cells and B cell lines.
**Culture Medium:** RPMI 1640 medium, 90%; fetal bovine serum, 10%
**Pres Medium:** FBS + 7.5% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-9110
**Donor:** Spleen cells.
**Immunogen:** human tonsillar lymphocytes.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** US Patent 5,182,368 dated Jan 26 1993.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H151
**Designation:** 2.28M1
**Species:** Mouse
**Specificity:** Anti HLA-A2+ A28
**Myeloma:** SP2/08A2
**Antibody Isotype:** IgM
**Description:** The hibridoma was produced by fusing SP2/08A2 myeloma cells with spleen and lymph node cells from a BALB/c mouse immunized with human peripheral blood leukocytes.(HLA phenotpe A2,A28,B27,B44,BW4,and Cw2).
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS+10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-166
**Donor:** BALB/c spleen and lymph node cells
**Immunogen:** Human peripheral blood leukocytes
**Viability:** 90% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** F.C.Grumet,Stanford University Blood center,Palo Alto, CA.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were

obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H152
**Designation:** BB7.2
**Species:** Human
**Specificity:** Anti HLA-A2+Aw69 cytotoxic
**Myeloma:** NS-1
**Antibody Isotype:** IgG2b
**Description:** The hybrid cell line BB7.2 produces a cytotoxic monoclonal anti body (IgG 2b)specific for HLA-A2.The line was produced by fusing spleen cells of a BALB/c mouse immunized with papain-solubilized HLA-A2 antigens with the NS-1 myeloma line.
**Culture Medium:** DMEM +4.5 g/L glucose,90% + 10% FBS
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-82
**Donor:** BALB/c
**Immunogen:** Papain solubilized HLA A2 antigen.
**Viability:** 87% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Hum.immunol.3:277-299,1981.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H153
**Designation:** 1C1
**Species:** Mouse
**Specificity:** Anti TCR V beta 5.2+V beta 5.3
**Antibody Isotype:** IgG1
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 96% ; 2.4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers

are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H154
**Designation:** F1
**Species:** Mouse
**Specificity:** Anti TCR V beta 2.3
**Antibody Isotype:** IgG2a
**Culture Medium:** RPMI 1640 + 20% FBS.
**Pres Medium:** FBS + 10% DMSO.
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c
**Viability:** 94% ; 3.4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H155
**Designation:** OT145
**Species:** Mouse
**Specificity:** Anti TCR V beta 6.7
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 87% ; 4.6 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Proc Nat Acad Sci USA 1986,83:7888;Science 1989,244:811;Eur J Immuol 1991,21:819
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H156
**Designation:** LC4-DBH

**Species:** Mouse
**Specificity:** Anti TCR V beta 5.1
**Myeloma:** P3X63/Ag8.653
**Antibody Isotype:** IgG1
**Description:** LC4-DBH produces an anti-idiotype monoclonal antibody of IgG1 isolate to the SUP-T13 cell line(CD2+,CD3+,CD4+,CD8+),which is a T acute lymphoblastic leukemia cell line.
**Culture Medium:** RPMI 1640 + 10% FBS
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** BALB/c
**Immunogen:** SUP-T13 cell line
**Viability:** 91% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Immunol 1989,142:1359;Eur J Immunol 1991,21:819.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H157
**Designation:** 4B2
**Species:** Mouse
**Specificity:** Anti human CD45
**Myeloma:** P3U1
**Antibody Isotype:** IgG2a
**Description:** The hibridoma cell line 4B2 secretes a mouse monoclonal anti body (IgG2a) that reacts with the human T200 common leukocyte antigen (CD45).The line was produced by fusing P3U1 myeloma cells with spleen cells from (BALB/c x DBA)F1 mice that had been immunized with human T cells.The anti body binds to protein A and reacts with all types of human leukocytes(but not with non-leukocytes).
**Culture Medium:** RPMI 1640 + 20% FBS
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-196
**Donor:** BALB/c x DBA/2)F1
**Immunogen:** human T cells.
**Viability:** 94% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** White Cell Differentiation Antigens (sample number 828),in leukocyte Typing 3,A.J.McMichael ,et al. ,eds ., Oxford university press ,1987
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers

are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H158
**Designation:** T3-3A1
**Species:** Mouse
**Specificity:** Anti human CD7
**Myeloma:** P3X63Ag8
**Antibody Isotype:** IgG1 k
**Description:** The hibrid cell line T3-3A1 produces a cytotoxic monoclonal anti body (IgG1 k) that reacts with human T cell subsets.the anti body recognizes an antigenic determinant on human helper T cells and on T cells that can be induced by Con A to suppress B cell Ig synthesis in vitro.The anti body detects a polypeptide of approximately MW 40000.The hybridoma was developed by fusion of P3X63Ag8 BALB/c myeloma cell line and spleen cells from BALB/c mice immunized with a human T cell line HSB-2 (ATCC CCL-120.1).The antigen recognized by the T3-3A1 antibody is a very early marcer of the T cell lineage,and may be useful for identifying acute lymphoblastic leukemias of the T-lineage.The cells have a functional life expectancy of approximatelly 150 passages.
**Culture Medium:** RPMI 1640,80% + FBS 20%
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-2
**Donor:** Spleen cells .
**Immunogen:** HSB-2 cells (ATCC CCL-120.1, an acute lymphocytic T leukemia cell line).
**Viability:** 91% ; 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Proc.Natl.Acad.Sci.USA 76:5829-5833,1979,ibid.,77:2914-2918,1980,J.Immunal.124:1237-1244,1980.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H159
**Designation:** LM2/1.6.11
**Species:** Mouse
**Specificity:** Anti human CD11b
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG1
**Description:** The hybridoma cell line LM2/1.6.11 secretes a mouse monoclonal anti body (IgG1) that reacts with human MAC-1(CD11b) antigen.The line was produced by fusing P3X63Ag8.653 myeloma

cells with spleen cells from BALB/c mice that had been immunized with immunoprecipitates of human granulocyte lysates using TS1/18 (See ATCC HB-203) and boosted with live human granulocytes.The anti body is specific for the alpha chain of the human MAC-1 antigen.
**Culture Medium:** DMEM + 4.5g/L glucose ,1 mM sodium pyruvate and 2 mM-L glutamine,90%, FBS 10%
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-204
**Donor:** Spleen cells .
**Immunogen:** Immunoprecipitates of human granulocyte lysates using TS1/18.
**Viability:** 90% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J.IMMUNAOL.137:2891-2900,1980.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H160
**Designation:** 26ic
**Species:** Mouse
**Specificity:** Anti human CD14
**Myeloma:** NS-1
**Antibody Isotype:** IgG2b k
**Description:** The hybridoma cell line 26ic secretes a mouse monoclonal anti body (IgG2b k) that reacts with a nonfunctinal domain on human CD14.The line was produced by fusing NS-1 myeloma cells with spleen cells from BALB/c mice that had been immunized with cultured human peripheral blood monocytes.The binding of 26ic dose not inhibit CD14 mediated activitis, and is useful for detecting CD14 expression by immunofluorescence and/or immunocytochemical methods.
**Culture Medium:** Modified Dulbecco,s medium 90%,heat-inactiveated gamma globulin-free horse serum,10%
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-246
**Donor:** Spleen cells .
**Immunogen:** Human peripheral blood monocytes. .
**Viability:** 93% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Hibrydoma 1: 329-337,1982, science(Washington,DC)249:1431-1433,1990.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee

that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H161
**Designation:** 7G7B6
**Species:** Mouse
**Specificity:** Anti human CD25
**Myeloma:** SP2/0-Ag14
**Antibody Isotype:** IgG2a
**Description:** The hibridoma cell line 7G7B6 secretes a mouse monoclonal antibady ( IgG2a )that reacts with human interleukin-2 (CD25 )eceptor.The line was produced by fusing SP2/0-Ag14 myeloma cells with spleen cells from BALB/c mice that had been immunized with influenza virus stimulated human peripheral blood mononuclear cells.
**Culture Medium:** MDM 90% +FBS 10%
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Cultures can be maintained by addition or replacement of fresh medium.Start cultures at 2 x10 exp^5 cells/ml and maintain between 1x10 exp^5 and 1x10 exp^6 cells/ml.
**ATCC Number:** HB-8784
**Donor:** Spleen cells.
**Immunogen:** Human peripheral blood mononuclear cells.
**Viability:** 95% ; 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** US.Patent 4,707,443 dated Nov 17 1987
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H162
**Designation:** C273
**Species:** Mouse
**Specificity:** Anti human CD20
**Myeloma:** SP2/0
**Antibody Isotype:** IgG1
**Description:** C273 was derived from the SP2/0 hybridoma cell line.It is transfected with plasmids PING2101 and PING2106.The cells are neomycin resistant and epress chimeric heavy and light chain antibody genes encoding the variable region of the mouse monoclonal antibody produced by 2H7 and a human constant region.
**Culture Medium:** DMEM+10mM HEPES +2mM L-glutamine,100 units/ml penicillin and 0.1 mg/ml streptomycin +10 FBS
**Pres Medium:** FBS + 10% DMSO

**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-9303
**Viability:** 90% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** US Patent 5,500,362 dated Mar 19 1996. Proc Natl Acad Sci USA 1985 82: 1766-1770. US Patent 5,824,656 dated Oct 20 1998.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H163
**Designation:** HNK-1
**Species:** Mouse
**Specificity:** Anti human CD57
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgM,Kappa light chain
**Description:** Animals were immunized with a membrane extract of the human lymphoblastoid cell line HSB-2.Spleen cells were fused with P3X63Ag8.653 myeloma cells.The antibody also react with glycoproteins presents on Schwann cells,oligodendrocytes and embryonic neurons.the cells will not grow if the medium lacks 2-mercaptoethanol.Tested and found negative for ectromelia virus(mousepox).
**Culture Medium:** RPMI 1640 + 2mM L-glutamine that is modified by ATCC to contain : 10mM HEPES+1mM Sodium pyruvate+4.5g/L glucose+1.5 g/L Sodium bicarbonate . supplemented with : 20% FBS+0.02mM 2ME.This medium is formulated for use with a 5% co2 in air atmospher.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** TIB-200
**Donor:** Spleen cells
**Immunogen:** Human lymphoblastoid cell line HSB-2.
**Viability:** 92% ; 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** J Immunol 1981 127: 1024-1029. J Exp Med 1982 155: 321-326.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H164
**Designation:** OKT1
**Species:** Mouse
**Specificity:** Anti human CD5
**Myeloma:** P3X63Ag8
**Antibody Isotype:** IgG1
**Description:** The hibridoma was produsedby the fusion of P3X63Ag8U1 mouse myeloma cells with splenocytes from BALB/c mice immunized with human peripheral blood lymphocytes.Monoclonal anti body (IgG1),reactive to human peripheral T cells,isproduced.
**Culture Medium:** IMDM 80% + FBS 20%
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** CRL-8000
**Donor:** Spleen cells
**Immunogen:** Human peripheral blood lymphocytes.
**Viability:** 90% ; 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Proc.Natl.Acad.Sci.USA77:4914-4917,1980,U.S.Pat.4,363,799.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H165
**Designation:** FR10B4
**Species:** Mouse
**Specificity:** Anti human CD22
**Antibody Isotype:** IgG1
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 95% ; 4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H166
**Designation:** RIV7
**Species:** Mouse
**Specificity:** Anti human CD4
**Antibody Isotype:** IgG2a
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 90% ; 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H167
**Designation:** CB-CALLA
**Species:** Mouse
**Specificity:** Anti human CD10
**Antibody Isotype:** IgG1
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 95% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H168
**Designation:** B-R18
**Species:** Mouse
**Specificity:** Anti human CD95
**Antibody Isotype:** IgG1
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 95% ; 2 x 10^6 cells/vial

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H169
**Designation:** EP-5
**Species:** Mouse
**Specificity:** Anti human fibronectin
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 89% ; 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H170
**Designation:** HISA43-1A1
**Species:** Mouse
**Specificity:** Anti human IgA
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 80% ; 1.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H171
**Designation:** CB16
**Species:** Mouse
**Specificity:** Anti human CD16
**Antibody Isotype:** IgG1
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 91% ; 1.6 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H172
**Designation:** 68-5A5
**Species:** Mouse
**Specificity:** Anti human CD18
**Antibody Isotype:** IgG2a
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 92% ; 2.2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H173
**Designation:** 156-3C11
**Species:** Mouse
**Specificity:** Anti human CD44
**Antibody Isotype:** IgG2a
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Immunogen:** Stimulated human leukocytes.

**Viability:** 94% ; 1.8 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H174
**Designation:** 123C3
**Species:** Mouse
**Specificity:** Anti human CD56
**Antibody Isotype:** IgG1
**Description:** CD56 is an isoform of the Neural Cell Adhesion Molecle (NCAM).CD56 is an adhesion molecule involved in intercellular homophilic adhesion and plays a role in outgrowth of neurites and the development of the nervous system.Furthermore,CD56is a marker for natural killer cells and found in various tumors. Several isoforms of NCAM have been identified:two transmembrane isoforms of 140 and 180 kD,a GPI-linked isoform of 120 kD which lacks a transmembrane domain and a fourth variant which is leading to the expression of a soluble form (sNCAM). Antibody 123C3 recognized the transmembrane glycoprotein of 140 and 180 kD.At the international workshop on SCLC antibody, 123C3 has been categorized as cluster 1 antibody.All cells in small cells carcinomas and carcinoids of the lung are strongly positive for 123C3. In non small lung cell carcinomas,123C3 staining has been associted with more advanced stage and a decreased survival after surgery. Positive staining with other tumors,includes medullary thyriod carcinomas and some ovarian tumors. This antibody can be used to support diagnosis of lymphoma or to detect residual disease for cases of CD56 positive T/NK-cell lymphoma in which the neoplastic lymphoid cells are small and show minimal atypia, especially in small biopsies.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 97% ; 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Immunophenotyping:** Not identified
**Reference:** Moolenaar,Cet al;Expression of neural cell adhesion molcule-related sialogycoprotein in small cell lung cancer and neuroblastoma cell lines H69 and CHP-212.Cancer Res 1990,50:1102
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H175
**Designation:** 203.6
**Species:** Mouse
**Specificity:** Anti human CD27
**Antibody Isotype:** IgG3
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 90% ; 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H176
**Designation:** MF20
**Species:** Mouse
**Specificity:** Anti chicken myosin
**Myeloma:** P3U-1
**Antibody Isotype:** IgG2b.kappa light chain
**Culture Medium:** RPMI 1640 + 15% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 95% ; 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Immunophenotyping:** Not identified
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H177
**Designation:** MBS 12
**Species:** Mouse
**Specificity:** Anti human alpha fetoprotein
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Immunophenotyping:** Not identified
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H178
**Designation:** 16.4
**Species:** Mouse
**Specificity:** Anti human cytokeratin 5+14
**Antibody Isotype:** IgG2a
**Culture Medium:** RPMI 1640 + 10% FBS..
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 95% ; 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Immunophenotyping:** Not identified
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H179
**Designation:** B-F10
**Species:** Mouse
**Specificity:** Anti human CD13
**Myeloma:** KG-1
**Antibody Isotype:** IgG1
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Donor:** Balb/c
**Viability:** 95% ; 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee

that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H180
**Designation:** 143-30
**Species:** Mouse
**Specificity:** Anti human CD55
**Antibody Isotype:** IgG1
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Immunogen:** PHA activated peripheral blood mononuclear cells.
**Viability:** 80% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H181
**Designation:** L1C1
**Species:** Mouse
**Specificity:** Anti human kappa light chain
**Antibody Isotype:** IgG1
**Description:** This antibody reacts with B cell folliles in human lymphoid tissues.The mantle zones give a mosaic pattern,while the germinal centers show a coarse meshwork pattern of staining.Kappa light chain antibody can be used for the identification of leukemias,plasmacytomas and certain non-Hodgkin's lymphomas.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Immunogen:** B Lymphoma cells(human)
**Viability:** 97% ; 1.4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H182
**Designation:** BP53.124
**Species:** Mouse
**Specificity:** Anti human P53
**Antibody Isotype:** IgG2a
**Description:** P53 protein is thought to act as a tumor suppressor gene.mutation of p53 may represent the most common genetic event in human malignancy.The overexpression and accumulation of p53 in cell nucleus was repoted for a number of human tumors,such as breast,lung and colon carcinomas.p53 overexpression may be an useful tumor and prognostic marker.This antibody reacts with both wild and mutant p53.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Immunogen:** recombinant human p53 protein.
**Viability:** 91% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Bartek,J.,et al.,1991,Oncogene 6,1699-1703
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H183
**Designation:** 3-3A
**Species:** Mouse
**Specificity:** Anti human bovine albumin
**Antibody Isotype:** IgG1
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 90% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H184
**Designation:** CB43
**Species:** Mouse

**Specificity:** Anti human CD147
**Myeloma:** NSO
**Antibody Isotype:** IgM
**Description:** CB43 recognizes the antigen CD147.This antigen is a single chain type I transmembrane with a MW of 50-60 kDa. It has been described as a tumor-cell-derived soluble factor that stimulates expression of collagenases by fibroblasts.Source : A BALB/c mouse was immunized.After three weeks the mouse was boosted and the splenocytes fused with myeloma cell line NSO.A positive hybridoma obtained after three limiting dilutions served as source for the hybridoma.
**Culture Medium:** RPMI 1640 + 10% FBS..
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 92% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H185
**Designation:** DF-T1
**Species:** Mouse
**Specificity:** Anti human CD43
**Myeloma:** KG1
**Antibody Isotype:** IgG1
**Description:** CD43 is expressed on all thymocytes and T-cells.This antibody is useful for identification and classification of T-cell malignancies and low grade B-cell lymphoma.(Species Reactivity : Cross-reacts with Human ).
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Immunogen:** Myeloblastic KG1 cells
**Viability:** 95% ; 1.7 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H186
**Designation:** BCA-B/20
**Species:** Mouse
**Specificity:** Anti human CD20
**Antibody Isotype:** IgG2a
**Description:** (Species Reactivity : Cross-reacts with Human ).
**Culture Medium:** RPMI 1640 + 10% FBS..
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 92% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H187
**Designation:** ICO106
**Species:** Mouse
**Specificity:** Anti human Lambda light chain
**Antibody Isotype:** IgG1
**Culture Medium:** RPMI 1640 + 10% FBS..
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Immunogen:** Human immunoglobulin
**Viability:** 92% ; 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** H188
**Designation:** B-K9
**Species:** Mouse
**Specificity:** Anti human CD106
**Antibody Isotype:** IgG1
**Culture Medium:** RPMI 1640 + 10% FBS..
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.

**Viability:** 92% ; 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H189
**Designation:** 2C11
**Species:** Mouse
**Specificity:** Anti human Pan-keratin
**Antibody Isotype:** IgG1
**Culture Medium:** RPMI 1640 + 10% FBS..
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Immunogen:** IgG from human serum
**Viability:** 90% ; 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H190
**Designation:** CRIS-3
**Species:** Mouse
**Specificity:** Anti human CD11a
**Antibody Isotype:** IgG2a
**Description:** Reacts with the majority of leukocytes including T and B cells,granulocytes,monocytes,activated macrophages,large granular lymphocytes and thymocytes.CRIS-3 recognizes the subunit of the Lymphocyte Function Associated-1 integrin antigen,clustered at The Second Leukocyte Typing Workshop.This antibody recognizes an antigen of 170/90 kDa.
**Culture Medium:** RPMI 1640 + 10% FBS..
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 92% ; 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were

obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H191
**Designation:** AT83
**Species:** Rat
**Specificity:** Anti mouse Thy 1
**Culture Medium:** RPMI 1640 + 10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**Viability:** 90% ; 1.2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H192
**Designation:** AC133.1
**Species:** Mouse
**Specificity:** Anti human CD34
**Myeloma:** SP2/0 Ag14
**Antibody Isotype:** IgG1;kappa light chain
**Description:** Animals were immunized with purified CD34 positive human progenitor stem sells,which had been pre-incubated with phytohemagglutinin (PHA).Lymph node cells were fused with Sp/2 Ag 14 mouse myeloma cells.The antibody reacts with a subset of hematopoietic progenitor cells derived from human bone marrow, fetal bone marrow and liver,cord blood and adult peripheral blood.The subset of cells recognized by AC133 IS CD34 bright,and contains substantially all of the CFU-GM activity present in the CD34+ population.This highly spesific distribution of AC133 makes it exceptionally useful as a reagent for isolating and characterizing human hematopoietic progenitor and stem cells.
**Culture Medium:** DMEM + 4mM L- glutamine that is modified by ATCC to contain 4.5g/L glucose and 1.5 g/L sodium bicarbonate +10% FBS.
**Pres Medium:** FBS + 10% DMSO
**Sub Culture:** Maintain cultures at 3-9 x 10^5 cells/ml, 5% CO2, 37`C.
**ATCC Number:** HB-12346
**Donor:** BALB/C
**Immunogen:** Purified CD34 positive human progenitor stem cells, which had been pre-incubated with phytohemagglutinin (PHA).

**Viability:** 92% ; 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** US Patent 5,843,633 dated Dec 1 1998. US Patent 6,455,678 dated Sep 24 2002. US Patent 6,468,794 dated Oct 22 2002.
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** H193
**Designation:** MR1
**Species:** Hamster
**Specificity:** Anti mouse CD40L(CD154)
**Myeloma:** NS-1
**Antibody Isotype:** IgG
**Description:** Animals were immunized with mouse T cells (Th1). Spleen cells were fused with NS-1 myeloma cells. The antibody detects a 39000 dalton protein selectively expressed on activated mouse T cells. A culture deposited at the ATCC as HB-11048 in May of 1992 was found to be contaminated with mycoplasma. Progeny were cured by a 21-day treatment with BM Cycline.
**Culture Medium:** RPMI 1640 medium with 2 mM L-glutamine adjusted to contain 1.5 g/L sodium bicarbonate, 4.5 g/L glucose, 10 mM HEPES, and 1.0 mM sodium pyruvate and supplemented with 0.05 mM 2-mercaptoethanol, 90%; fetal bovine serum, 10%
**Pres Medium:** medium, 92.5%; DMSO, 7.5%
**Sub Culture:** Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 2 to 3 X 10 exp5 viable cells/ml. Maintain cell density between 1 X 10 exp5 and 1 X 10 exp6 viable cells/ml.
**ATCC Number:** CRL-2580
**Donor:** Spleen cells.
**Immunogen:** immunoglobulin; monoclonal antibody; against mouse CD40 ligand (CD154, CD40L, gp39)
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** 23483: Roy M , et al. The regulation of the expression of gp39, the CD40 ligand, on normal and cloned CD4+ T cells. J. Immunol. 151: 2497-2510, 1993. PubMed: 8103067
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** H194
**Designation:** A-HER 2
**Species:** Mouse

**Specificity:** Anti HER2 receptor
**Myeloma:** P3X63Ag8.653
**Antibody Isotype:** IgG1
**Description:** Comments: Animals were immunized with HER2-amplified NIH 3T3 transformed cells. Spleen cells were fused with P3X63Ag8.653 myeloma cells. The antibody binds to the extracellular domain of the HER2 receptor and inhibits the growth of SK-BR-3 (ATCC HTB-30) breast tumor cells. [30816] The SK-BR-3 cell line overexpresses the HER2/c-erb-2 gene product. [49665] The antibody prevents HER2/c-erb-2 transformed NIH 3T3 cells from forming colonies in soft agar. [49665] It does not cross-react with the human epidermal growth factor (EGF) receptor and it will immunoprecipiate p185HER2. [49662] [49665]
**Culture Medium:** Dulbecco's Modified Eagle's Medium, Catalog No. 30-2002. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.
**Pres Medium:** 95%; DMSO, 5%
**Sub Culture:** Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 1 X 10(5) viable cells/ml.
**ATCC Number:** CRL-10463
**Donor:** Spleen cells
**Immunogen:** HER2-amplified NIH 3T3 transformed cells.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** 30816: Hudziak RM , et al. Monoclonal antibodies directed to the Her2 receptor. US Patent 5,677,171 dated Oct 14 1997 32176: Hudziak RM , et al. In vivo tumor detection assay. US Patent 5,720,937 dated Feb 24 1998
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** H195
**Designation:** LB3.1
**Species:** Mouse
**Specificity:** Anti HLA-DR alpha chain
**Myeloma:** Sp2/0-Ag14
**Antibody Isotype:** IgG2a
**Description:** Animals were immunized with purified HLA-DR protein. Spleen cells were fused with Sp2/0-Ag14 myeloma cells. The antibody reacts with a conformational epitope on the alpha chain of HLA-DR.
**Culture Medium:** RPMI 1640 medium, 90%; fetal bovine serum, 10%
**Pres Medium:** 95%; DMSO, 5%
**Sub Culture:** Cultures can be maintained by addition or replacement of fresh medium. Start cultures at 2 X 10 exp5 cells/ml and maintain between 1 X 10 exp5 and 1 X 10 exp6 cells/ml.
**ATCC Number:** HB-298
**Donor:** Spleen cells
**Immunogen:** purified HLA-DR protein

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** 56182: Kuchroo VK , Greenfield EA . Specific antibodies and antibody fragments. US Patent 6,207,156 dated Mar 27 2001
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** H196
**Designation:** A3.6B10
**Species:** Mouse
**Specificity:** Anti human CTLA-4 (CD152)
**Myeloma:** Sp2/0-Ag14
**Antibody Isotype:** IgG2a
**Description:** Animals were immunized with activated human T cell clones. Spleen cells were fused with Sp2/0-Ag14 cells. The antibody was able to block B7 ligand binding. [56182]
**Culture Medium:** The base medium for this cell line is ATCC-formulated Dulbecco's Modified Eagle's Medium, Catalog No. 30-2002. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.
**Pres Medium:** FBS + 5% DMSO
**Sub Culture:** Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 1 X 10 exp5 viable cells/ml. Maintain cell density between 1 X 10 exp5 and 1 X 10 exp6 viable cells/ml.
**ATCC Number:** HB-12318
**Donor:** Spleen cells**.**
**Immunogen:** activated human T cell clones..
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** 56182: Kuchroo VK , Greenfield EA . Specific antibodies and antibody fragments. US Patent 6,207,156 dated Mar 27 2001
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** H197
**Designation:** hCD40L-M90
**Species:** Mouse
**Specificity:** Anti human CD40L
**Myeloma:** NS-1
**Antibody Isotype:** IgG1
**Description:** Animals were immunized with human CD40 ligand (CD154, CD40L). Spleen cells were fused with either Ag8.653 or NS1 mouse myeloma cells (the specific line used was not specified). The antibody recognizes the human CD40L polypeptide.

**Culture Medium:** DMEM + 10% FBS
**Pres Medium:** FBS + 5% DMSO
**Sub Culture:** Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 1 X 10 exp5 viable cells/ml. Maintain cell density between 1 X 10 exp5 and 1 X 10 exp6 viable cells/ml.
**ATCC Number:** HB-12055
**Donor:** Spleen cells.
**Immunogen:** human CD40 ligand (CD154, CD40L)
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** 44212: Armitage RJ , et al. Monoclonal antibodies to CD40 ligand, pharmaceutical composition comprising the same and hybridomas producing the same. US Patent 5,961,974 dated Oct 5 1999
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** H198
**Designation:** ACT I
**Species:** Mouse
**Specificity:** Anti human actin
**Myeloma:** NS-1
**Antibody Isotype:** IgG1
**Description:** Animals were immunized with actin from Dictyostelium discoideum. Spleen cells were fused with NS-1 myeloma cells. The antibody reacts with actin from prokaryotic organisms at an epitope distinct from that recognized by ACT IV (ATCC HB-81). The antibody does not cross-react with eukaryotic actins. Tested and found negative for ectromelia virus (mousepox).
**Culture Medium:** RPMI 1640 medium with HAT, 80%; fetal bovine serum, 20%
**Pres Medium:** FBS + 5% DMSO
**Sub Culture:** Cultures can be maintained by addition or replacement of fresh medium. Start cultures at 2 X 10 exp5 cells/ml and maintain between 1 X 10 exp5 and 1 X 10 exp6 cells/ml.
**ATCC Number:** HB-80
**Donor:** Spleen cells.
**Immunogen:** immunoglobulin; monoclonal antibody; against actin
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Simpson PA, et al. Monoclonal antibodies prepared against Dictyostelium actin: characterization and interactions with actin. J. Cell Biol. 99: 287-295, 1984. PubMed: 6203918
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** H199
**Designation:** BD5-2d
**Species:** Mouse
**Specificity:** Anti human HER-2/neu
**Myeloma:** SP2/O
**Antibody Isotype:** IgG1 kappa
**Description:** Animals were immunized with a transfected NIH 3T3 cell line, 18-3-7 that expresses full length normal human neu protein. Spleen cells were fused with SP2/O myeloma cells (ATCC CRL 1581). The antibody recognizes substantially purified p100, human neu related protein, the full-length HER-2/neu molecule in tumor tissue (p185) or the extracellular domain (ECD) (p105) in serum, plasma, cell cultures and fluids.
**Culture Medium:** DMEM + 20% FBS
**Pres Medium:** FBS + 7.5% DMSO
**Sub Culture:** Maintain cultures at a cell concentration between 6 x 10(4) and 6 X 10(5) cells/ml.
**ATCC Number:** HB-9689
**Donor:** Spleen cells.
**Immunogen:** Anti human HER-2/neu
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Carney WP, McKenzie SJ. Detection and quantification of neu related proteins in the biological fluids of humans. US Patent 5,401,638 dated Mar 28 1995
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** H200
**Designation:** 20.3 (Tab 250)
**Species:** Mouse
**Specificity:** Anti human C-erb B2
**Myeloma:** P3X63Ag8
**Antibody Isotype:** IgG1; kappa light chain
**Description:** Animals were immunized with NIH3T3 cells transfected with the human c-erb B2 oncogene. Spleen cells were fused with P3X63Ag8.653 mouse myeloma cells.
**Culture Medium:** Iscove's Modified Dulbecco's Medium + 20% FBS
**Pres Medium:** FBS + 5% DMSO
**Sub Culture:** Maintain cell density between 1 X 10 exp5 and 1 X 10 exp6 viable cells/ml.
**ATCC Number:** CRL-2655
**Donor:** Spleen cells.
**Immunogen:** Anti human c-erbB-2
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Reference:** Shawver LK, et al. Anti-neoplastic drugs in cancer therapy. US Patent 6,123,939 dated Sep 26 2000
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were

obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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# HLA Defined Collection

**NCBI Code:** C173
**Designation:** LCL-PI 4
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 90%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,33.01 , B: 35.011,14.02 , C: 08.01,08.01 , DRB: 01.01,14.01 , DQB: 05.031,05.031 ,DQA: 01.01,01.01
Serologic-HLA Typing : A28 **,** B51(5), B8, Bw6 **,** Cw4 **,** DR1, DR14, DR52 **,** DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C174
**Designation:** LCL-PI 5
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 99%, 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A9 **,** Bw4 **,** Cw4 **,** DR1, DR52 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C175
**Designation:** LCL-PI 7
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 84%, 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:01.011,68.011 , B: 55.01,53.03 , C: 01.02,12.031 , DRB: 13.02,07 , DQB: 02.01,06.04 ,DQA: 01.021,02.01
Serologic-HLA Typing : A28, A43 **,** B35, Bw6 **,** DR7, DR53 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C220
**Designation:** LCL-PI 9
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:01.011,26.01 , B: 13.01,38.01 , C: 06.02,12.031 , DRB: 13.01,07 , DQB: 06.02,02.01 ,DQA: 01.03,02.01
Serologic-HLA Typing : A1, A24(9) **,** B44(12), B13, Bw4, Bw6 **,** DR7, DR53 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where

the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C225
**Designation:** LCL-PI 14
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:03.011,24.02 , B: 45.04,53.03 , C: 01.02,06.02 , DRB: 04,04 , DQB: 03.02,02.05 ,DQA: 03.011,03.011
Serologic-HLA Typing : A3, A24(9) **,** B51(5), Bw4, Bw6 **,** Cw4 **,** DR4, DR53 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C229
**Designation:** LCL-PI 18
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:23.01,26.08 , B: 08.01,35.011 , C: 07.011,07.011 , DRB: 03.01,13.03 , DQB: 02.01,03.011 ,DQA: 05.05,06.011 Serologic-HLA Typing : A24(9), A10 **,** B51(5) **,** DR52 **,** DQ2, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C231
**Designation:** LCL-PI 20
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:03.011,24.02 , B: 55.01,51.011 , C: 01.02,13.01 , DRB: 11,13.01 , DQB: 03.011,06.02 ,DQA: 01.03,05.05
Serologic-HLA Typing : A24 **,** B51(5), B22, Bw4, Bw6 **,** DR3, DR10 **,** DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C232
**Designation:** LCL-PI 21
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 96%, 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:24.02,33.01 , B: 14.02,53.03 , C: 08.01,08.01 , DRB: 01.01,12 , DQB: 05.01,03.011 ,DQA: 01.01,05.05
Serologic-HLA Typing : A11, A24 **,** B51(5), B14, Bw4, Bw6 **,** DR1, DR3 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C239
**Designation:** LCL-PI 28
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 96, 1 x 10^6 cells/vial
**Sterility:** Test for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A24(9), A28 **,** B51(5), B44(12), Bw4, Bw6 **,** Cw4 **,** DR11, DR52, DR53 **,**

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C240
**Designation:** LCL-PI 29
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:03.011,03.011 , B: 51.011,55.01 , C: 01.02,14.021 , DRB: 10.01,11 , DQB: 05.01,03.011 ,DQA: 01.05,05.05
Serologic-HLA Typing : A1, A3 **,** B22, B51(5), Bw4, Bw6 **,** DR1, DR11(5), DR52 **,** DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C241
**Designation:** LCL-PI 30
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A24(9) **,** B8, B44, Bw4, Bw6 **,** DR3, DR52, DR53 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C242
**Designation:** LCL-PI 31
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:24.02,11.011 , B: 56.01,51.011 , C: 06.02,06.02 , DRB: 07,14.01 , DQB: 05.031,03.012 ,DQA: 01.05,02.01
Serologic-HLA Typing : A24, A29 **,** B5, B21, Bw6 **,** Cw4 **,** DR7, DR14, DR52, DR53 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C244
**Designation:** LCL-PI 33
**Sex:** Male

**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 94%, 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:03.011,03.011 , B: 53.03,53.03 , C: 12.031,12.031 , DRB: 15,03.01 , DQB: 05.031,03.032 ,DQA: 01.05,02.01
Serologic-HLA Typing : A24 **,** B5, B44(12), Bw4, Bw6 **,** Cw3, Cw4 **,** DR2, DR15, DR52 **,**

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C245
**Designation:** LCL-PI 34
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 86%, 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A24 **,** Bw4, Bw6 **,** Cw3 **,** DR4, DR11, DR52 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C247
**Designation:** LCL-PI 36
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 88%, 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**Depositor:** Originated in NCBI

Serologic-HLA Typing : A24(9) **,** Bw4, Bw6 **,** DR2, DR15, DR52, DR53 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C248
**Designation:** LCL-PI 37
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A25, A43 **,** Bw4, Bw6 **,** DR53 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C249
**Designation:** LCL-PI 65
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 92%, 3.7 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:30.01,24.02 , B: 55.01,07.021 , C: 07.011,01.02 , DRB: 04,13.01 , DQB: 06.02,03.05 ,DQA: 01.03,03.011
Serologic-HLA Typing : A9 **,** B7, B22, Bw6 **,** DR3, DR4, DR53 **,** DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C260
**Designation:** LCL-PI 49
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 95%, 1.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:23.01,24.02 , B: 44.021,15.24 , C: 03.031,03.031 , DRB: 15,03.01 , DQB: 06.011,02.01 ,DQA: 01.03,05.011
Serologic-HLA Typing : A1, A43 **,** B8, B53, Bw6 **,** Cw4 **,** DR7, DR15, DR52, DR53 **,** DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C262
**Designation:** LCL-PI 51
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 98%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:30.01,11.011 , B: 40.02,40.02 , C: 06.02, , DRB: 16,07 , DQB: 05.01,02.01 ,DQA: 01.021,02.01
Serologic-HLA Typing : A11 **,** B5, Bw4, Bw6 **,** ,DR2, DR7, DR52, DR53 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide

sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C263
**Designation:** LCL-PI 52
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A24(9) **,** B7, B53, Bw4, Bw6 **,** Cw4 **,** DR52 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C265
**Designation:** LCL-PI 54
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 98%, 4.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:64.011,03.011 , B: 13.01,38.01 , C: 06.02,12.031 , DRB: 07,14.01 , DQB: 05.01,02.01 ,DQA: 01.05,02.01
Serologic-HLA Typing : A24, A28 **,** B13, Bw4, Bw6 **,** DR7, DR14, DR53 **,**

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C266
**Designation:** LCL-PI 55
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 97%, 2.3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:24.02,30.01 , B: 13.01,51.011 , C: 06.02,06.02 , DRB: 04,07 , DQB: 03.02,02.01 ,DQA: 02.01,03.011
Serologic-HLA Typing : A24(9) **,** B51(5), B13, Bw4, Bw6 **,** DR4, DR14, DR53 **,** DQ2, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C267
**Designation:** LCL-PI 56
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of healthy adult Iranian male.
**Viability:** 98%, 4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:6.08,23.01 , B: 08.01,45.02 , C: 07.011,07.011 , DRB: 03.01,07 , DQB: 02.01,02.01 ,DQA: 02.01,05.011
Serologic-HLA Typing : A10, A24 **,** Bw4,Bw6 **,** DR7, DR52, DR53 **,** DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C268
**Designation:** LCL-PI 57
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:24.02,24.02 , B: 38.05,53.03 , C: 08.01,08.01 , DRB: 01.01,15 , DQB: 05.01,06.02 ,DQA: 01.01,01.021
Serologic-HLA Typing : A24(9), A11 **,** B5, B8, Bw4, Bw6 **,** Cw4 **,** DR1, DR2 **,** DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C269
**Designation:** LCL-PI 58
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 1.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,02.011 , B: 38.01,51.011 , C: 16.02,12.031 , DRB: 13.01,16 , DQB: 06.02,05.01 ,DQA: 01.021,01.03
Serologic-HLA Typing : A24(9), A28 **,** B5, B8, Bw4, Bw6 **,** Cw4, Cw5 **,** DR2, DR52 **,** DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C273
**Designation:** LCL-PI 62
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 94%, 3.2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,26.01 , B: 38.01,15.03 , C: 12.031,12.031 , DRB: 04,15 , DQB: 05.01,02.01 ,DQA: 01.01,05.011
Serologic-HLA Typing : A28, A43 **,** B7, B44, Bw4, Bw6 **,** Cw5 **,** DR1, DR15 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C274
**Designation:** LCL-PI 63
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 96%, 5.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:01.011,02.011 , B: 51.011,53.03 , , DRB: 04,04 , DQB: 03.02,03.02 ,DQA: 03.011,03.011
Serologic-HLA Typing : A28, A43 **,** B44, B53, Bw4, Bw6 **,** Cw4 **,** DR4, DR53 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C277
**Designation:** LCL-PI 66

**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 95%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:26.01,02.011 , B: 57.05,14.02 , C: 03.02,05.01 , DRB: 01.01,03.01 , DQB: 05.01,02.01 ,DQA: 01.01,05.011
Serologic-HLA Typing : A28, A43 **,** Bw4 **,** Cw3 **,** DR52 **,** DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C278
**Designation:** LCL-PI 67
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 96%, 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:24.02,01.011 , B: 41.01,55.01 , C: 17.01,17.01 , DRB: 13.01,07 , DQB: 03.032,06.02 ,DQA: 01.03,02.01
Serologic-HLA Typing : A1, A9 **,** B7, B22, Bw4, Bw6 **,** Cw2 **,** DR3, DR4, DR53 **,** DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C279
**Designation:** LCL-PI 68
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral

blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 2.2 x 10^6 cells/vial
**Sterility:** Tess for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,32.01 , B: 41.01,55.01 , C: 01.02,12.031 , DRB: 04,11 , DQB: 03.011,03.02 ,DQA: 03.011.03.05
Serologic-HLA Typing : A24(9), A28 **,** Bw4, Bw6 **,** Cw4 **,** DR11, DR52 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C281
**Designation:** LCL-PI 70
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 97%, 1.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:03.011,30.01 , B: 07.021,51.011 , C: 07.011,07.011 , DRB: 11,04 , DQB: 03.05,03.012 ,DQA: 03.011,05.05
Serologic-HLA Typing : A9 **,** B7, B51(5), Bw4, Bw6 **,** Cw4 **,** DR11(5), DR53 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C282
**Designation:** LCL-PI 71
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 1.7 x 10^6 cells/vial

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,24.02 , B: 51.011,49.01 , C: 07.011,16.02 , DRB: 13.02,11 , DQB: 06.04,03.011 ,DQA: 01.021,05.05
Serologic-HLA Typing : A24(9) **,** Bw4 **,** DR3, DR9, DR53 **,** DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C284
**Designation:** LCL-PI 73
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 99%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A26, A33 **,** B17 **,** DR2,DR15 **,** DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C285
**Designation:** LCL-PI 74
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 96%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,01.011 , B: 51.011,37.01 , C: 13.01,06.02 , DRB: 14.01,04

, DQB: 03.02,05.031 ,DQA: 01.05,03.011
Serologic-HLA Typing : A2 , Bw4,Bw6 , DR14, DR52, DR53 , DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C287
**Designation:** LCL-PI 76
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 96%, 1.6 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:29.01,01.011 , B: 53.03,07.021 , , DRB: 10.01,15 , DQB: 06.011,05.01 ,DQA: 01.03,01.05
Serologic-HLA Typing : A28, A29 , B5, B7, Bw6 , Cw4 , DR2, DR15 , DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C289
**Designation:** LCL-PI 78
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 99%, 9 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCB

Molecular-HLA Typing : A:23.01,33.01 , B: 35.011,49.01 , C: 07.011,07.011 , DRB: 13.03,07 , DQB: 02.01,03.011 ,DQA: 02.01,05.05
Serologic-HLA Typing : A24, A32 , B53, Bw4, Bw6 , Cw4 , DR7, DR53 , DQ2, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C290
**Designation:** LCL-PI 79
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 97%, 5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:24.02,24.02 , B: 07.021,13.01 , C: 06.02, , DRB: 07,10.01 , DQB: 05.01,02.01 ,DQA: 01.05,02.01
Serologic-HLA Typing : A24, A29 **,** B7, B13, Bw4, Bw6 **,** Cw2 **,** DR7, DR53 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C292
**Designation:** LCL-PI 81
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 3.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:24.02,01.011 , B: 41.01,35.011 , C: 17.01,17.01 , DRB: 07,11 , DQB: 03.011,03.011 ,DQA: 05.05,05.05
Serologic-HLA Typing : A24(9) **,** B18, B53, Bw6 **,** DR11, DR52 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide

sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C293
**Designation:** LCL-PI 82
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 98%, 1.7 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:24.02,02.011 , B: 50.01,44.021 , C: 05.01,06.02 , DRB: 07,11 , DQB: 03.011,02.01 ,DQA: 05.05,02.01
Serologic-HLA Typing : A9, A28 **,** B44, Bw4 **,** DR4, DR11, DR52, DR53 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C294
**Designation:** LCL-PI 83
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 1.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:32.03,32.03 , B: 53.03,07.021 , , DRB: 16,12 , DQB: 03.012,05.01 ,DQA: 05.05,01.021
Serologic-HLA Typing : A24(9), A29 **,** B7, B51(5), Bw4, Bw6 **,** Cw2, Cw5 **,** DR11, DR52 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where

the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C296
**Designation:** LCL-PI 85
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 96%, 3.6 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:32.01,03.011 , B: 51.011,07.021 , , DRB: 03.01,11 , DQB: 02.01,03.011 ,DQA: 05.011,05.05
Serologic-HLA Typing : A24(9) **,** B7, B53, Bw4, Bw6 **, ,** DR11, DR52 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C298
**Designation:** LCL-PI 87
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy child Iranian male.
**Viability:** 98%, 5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:03.011,24.02 , B: 51.011,55.01 , C: 01.02, , DRB: 04,13.01 , DQB: 06.02,03.02 ,DQA: 01.03,03.011
Serologic-HLA Typing : A2 **,** B51(5), B22, Bw4, Bw6 **, ,** DR2, DR10 **,** DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C303
**Designation:** LCL-PI 92
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 97%, 3.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:03.011,11.011 , B: 49.01,53.03 , C: 07.011,07.011 , DRB: 15,13.02 , DQB: 05.01,06.04 ,DQA: 01.021,01.021
Serologic-HLA Typing : A11 **,** B5, Bw4, Bw6 **,** Cw4 **,** DR2, DR52 **,** DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C305
**Designation:** LCL-PI 94
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 1.8 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A24(9) **,** B12, B53, Bw4, Bw6 **,** Cw4 **,** DR11, DR15, DR52 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C306
**Designation:** LCL-PI 95
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 99%, 3.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:33.01,26.01 , B: 38.05,14.02 , C: 12.031,08.01 , DRB: 03.01,01.01 , DQB: 05.01,02.01 ,DQA: 01.01,05.011
Serologic-HLA Typing : A43 **,** B18, Bw4 **,** DR1, DR2, DR52 **,** DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C308
**Designation:** LCL-PI 97
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 2.3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:24.04,32.01 , B: 35.011,41.01 , C: 16.02,02.03 , DRB: 01.01,14.01 , DQB: 05.031,05.031 ,DQA: 01.05,01.05
Serologic-HLA Typing : A24(9), A28 **,** B8, B51(5), Bw4, Bw6 **, ,** DR1, DR14, DR52 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C309
**Designation:** LCL-PI 98
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 1.7 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,03.011 , B: 44.021,13.01 , C: 06.02,13.01 , DRB: 07,07 , DQB: 02.01,02.01 ,DQA: 02.01,02.01
Serologic-HLA Typing : A24(9), A43 **,** B44(12), B53, Bw4, Bw6 **,** Cw2 **,** DR3, DR52, DR53 **,** DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C310
**Designation:** LCL-PI 99
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 1.6 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A26 **,** B38, B51, Bw4, Bw6 **, ,** DR11 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C311
**Designation:** LCL-PI 100
**Sex:** Male

**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A2 **,** B51(5), Bw6 **,** Cw4 **,** DR4, DR7, DR53 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C312
**Designation:** LCL-PI 101
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:26.08,26.08 , B: 51.011,51.011 , C: 16.02,16.02 , DRB: 04,15 , DQB: 03.011,05.01 ,DQA: 01.021,03.011
Serologic-HLA Typing : A24(9), A43 **,** B51(5), Bw4, Bw6 **,** **,** DR4, DR15 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C314
**Designation:** LCL-PI 103
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 96%, 2.6 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,03.011 , B: 18.09,35.011 , C: 06.02,07.011 , DRB: 15,11 , DQB: 06.011,03.011 ,DQA: 01.03,05.05
Serologic-HLA Typing : A24(9) , B8, B53, Bw6 , Cw4 , DR15, DR52 , DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C315
**Designation:** LCL-PI 104
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 84%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:23.01,33.01 , B: 14.02,44.021 , C: 08.01,13.01 , DRB: 01.01,07 , DQB: 02.01,05.01 ,DQA: 01.01,02.01
Serologic-HLA Typing : A24(9) , B18, B44(12), Bw4, Bw6 , DR53 , DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C316
**Designation:** LCL-PI 105
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 2.6 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A10, A24 , B5, Bw4, Bw6 , DR1, DR3, DR53 , DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C317
**Designation:** LCL-PI 106
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 97%, 1.7 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A24(9) , B53, Bw4,Bw6 , Cw4, Cw5 , DR7, DR52, DR53 , DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C327
**Designation:** LCL-PI 116
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 96%, 1.4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:68.011,01.011 , B: 53.03,53.03 , C: 12.031,07.011 , DRB: 07,15 , DQB: 02.01,02.01 ,DQA: 01.021,02.01
Serologic-HLA Typing : A28 , B7, Bw6 , DR2, DR7, DR53 , DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where

the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C328
**Designation:** LCL-PI 117
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 95%, 2.7 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:01.011,68.011 , B: 53.03,07.021 , C: 07.011,12.031 , DRB: 07,15 , DQB: 06.02,02.01 ,DQA: 01.021,02.01
Serologic-HLA Typing : A24(9), A28 **,** B7, Bw6 **,** DR2, DR52 **,** DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C329
**Designation:** LCL-PI 118
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 98%, 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:01.011,02.011 , B: 55.01,38.01 , C: 07.011,02.03 , DRB: 02.01,13.02 , DQB: 06.04,02.01 ,DQA: 01.021,05.011 Serologic-HLA Typing : A24(9), A28 **,** B22, B53, Bw4, Bw6 **,** DR3, DR52 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C331
**Designation:** LCL-PI 120
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 2.3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A24, A32 **,** B5, Bw4 **,** Cw1 **,** DR4, DR52 **,** DQ2, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C333
**Designation:** LCL-PI 122
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 94%, 2.7 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:68.011,01.011 , B: 07.021,53.03 , C: 07.011,12.031 , DRB: 15,07 , DQB: 06.02,02.01 ,DQA: 01.021,02.01
Serologic-HLA Typing : A28 **,** B7, B53, Bw6 **,** DR2, DR7, DR53 **,** DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C340
**Designation:** LCL-PI 129
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 95%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:33.01,24.02 , B: 08.01,57.05 , C: 03.02,07.011 , DRB: 03.01,16 , DQB: 05.01,02.01 ,DQA: 01.021,05.011
Serologic-HLA Typing : A24 **,** B8, Bw4, Bw6 **,** Cw3 **,** DR2, DR3, DR52 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C344
**Designation:** LCL-PI 133
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,26.01 , B: 07.021.50.01 , C: 12.031,12.031 , DRB: 15,07 , DQB: 05.01,06.04 ,DQA: 01.03,02.01
Serologic-HLA Typing : A25(10), A28 **,** B7, Bw6 **,** DR2, DR7, DR53 **,** DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C346
**Designation:** LCL-PI 135
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 98%, 1.2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A24(9), A28 **,** B53, Bw4, Bw6 **,** Cw4 **,** DR7, DR52, DR53 **,** DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C351
**Designation:** LCL-PI 140
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A11, A26 **,** B7, B21, B55, Bw4, Bw6 **,** Cw4 **,** DR14, DR52, DR53 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C356
**Designation:** LCL-PI 145
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.

**Viability:** 98%, 2 x 10^6 cells/vial
**Sterility:** Tesst for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A1, A29 **,** B7, Bw4, Bw6 **,** Cw1, Cw4 **,** DR4, DR11, DR14, DR53 **,** DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C358
**Designation:** LCL-PI 147
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:32.04,03.011 , B: 52.011,08.01 , C: 07.011,12.021 , DRB: 13.03,03.01 , DQB: 02.01,03.011 ,DQA: 05.05,05.05 Serologic-HLA Typing : A24, A32 **,** B8, B51(5), Bw4, Bw6 **,** DR3, DR52 **,** DQ2, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C369
**Designation:** LCL-PI 158
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 95%, 1.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:01.011,24.02 , B: 08.01,41.01 , C: 07.011,06.02 , DRB: 11,15 , DQB: 05.01,03.012 ,DQA: 01.021,05.05
Serologic-HLA Typing : A24 , B8 , DR1, DR11 , DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C381
**Designation:** LCL-PI 170
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 98%, 3.3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:68.011,02.011 , B: 53.03,41.01 , C: 17.01,02.03 , DRB: 10.01,13.03 , DQB: 05.01,03.011 ,DQA: 01.05,05.05
Serologic-HLA Typing : A24, A28 , B53, Bw6 , Cw4 , DR1 , DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C382
**Designation:** LCL-PI 171
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 93%, 2.7 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:32.01,02.011 , B: 41.01,41.01 , C: 02.01,07.011 , DRB: 10.01,07 ,

DQB: 02.01,05.01 ,DQA: 01.05,02.01
Serologic-HLA Typing : A24, A28 , B5, Bw4, Bw6 , Cw4 , DR7, DR10, DR53 , DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C383
**Designation:** LCL-PI 172
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,24.02 , B: 58.02,53.03 , C: 03.07,03.07 , DRB: 10.01,16 , ,DQA: 01.01,01.021
Serologic-HLA Typing : A24 , B8, Bw4, Bw6 , DR2, DR10 ,

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C384
**Designation:** LCL-PI 173
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 3.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,30.01 , B: 13.01,27.01 , C: 02.05,06.02 , DRB: 07,10.01 , DQB: 05.01,02.01 ,DQA: 01.05,02.01
Serologic-HLA Typing : A28 , B13, B27, Bw4, Bw6 , Cw2 , DR7, DR14, CR53 , DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C389
**Designation:** LCL-PI 178
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian adult female.
**Viability:** 93%, 2.2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A26 **,** B7, B44 **,** Cw1 **,** DR7, DR10 **,** DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C390
**Designation:** LCL-PI 179
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian female child.
**Viability:** 98%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:26.01,33.01 , B: 14.02,14.02 , C: 08.01,08.01 , DRB: 01.01,01.01 , DQB: 05.01,05.01 ,DQA: 01.01,01.01
Serologic-HLA Typing : A11, A43 **,** B14, Bw6 **,** DR1, DR3, DR53 **,**

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the

information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C395
**Designation:** LCL-PI 184
**Sex:** Female
**DNA available:** Yes
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 98%, 5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A3 **,** B7 **,** Cw1 **,** DR10 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C396
**Designation:** LCL-PI 185
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 90%, 1 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A11, A28 **,** B18, B22, Bw6 **,** DR1 **,** DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C398
**Designation:** LCL-PI 187
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of healthy adult Iranian female.
**Viability:** 97%, 4 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A23, A29 **,** B17, B37 **,** Cw1 **,** DR11, DR52 **,** DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C399
**Designation:** LCL-PI 188
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 90%, 1.3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:01.011,11.011 , B: 40.02,55.01 , C: 01.02 , DRB: 15,13.01 , DQB: 06.011,06.02 ,DQA: 01.03,05.011
Serologic-HLA Typing : A11, A28 **,** B18, Bw6 **,** DR1, DR2 **,** DQ1

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C410
**Designation:** LCL-PI 199
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral

blood lymphocytes of a healthy adult Iranian male.
**Viability:** 98%, 2.5 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:03.011,33.01 , B: 35.011,14.02 , C: 08.01,12.021 , DRB: 01.01,07 , DQB: 05.05,06.011 ,DQA: 01.01,02.01
Serologic-HLA Typing : A11 **,** B5, B8, Bw6 **,** Cw4 **,** DR1, DR7, DR53 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C411
**Designation:** LCL-PI 200
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.
**Viability:** 98%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:11.011,29.01 , B: 38.01,52.011 , C: 12.021,12.031 , DRB: 11,14.01 , DQB: 05.031,03.011 ,DQA: 01.05,05.05
Serologic-HLA Typing : A11, A29 **,** B8, B51(5), Bw4, Bw6 **,** Cw4 **,** DR11, DR14, DR52 **,** DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C418
**Designation:** LCL-PI 207
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian female.

**Viability:** 98%, 2 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:26.01,26.01 , B: 13.04,38.01 , C: 06.02,12.31 , DRB: 07,13.01 , DQB: 06.02,02.01 ,DQA: 01.03,02.01
Serologic-HLA Typing : A1, A24 **,** B13, B53, Bw4, Bw6 **,** Cw4 **,** DR4, DR7, DR52, DR 53 **,** DQ1, DQ2

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C421
**Designation:** LCL-PI 210
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** 95%, 3 x 10^6 cells/vial
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Serologic-HLA Typing : A23, A26 **,** B5, B22 **,** Cw1,Cw4 **,** DR7, DR15 **,** DQ1, DQ3

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information. The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C422
**Designation:** LCL-PI 84
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral

blood lymphocytes of a healthy adult Iranian male.
**Viability:** .
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:03.011,26.13 , B: 53.03,38.01 , C: 17.01,01.02 , DRB: 13.01,03.01 , DQB: 06.02,02.01 ,DQA: 05.011,01.03

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C423
**Designation:** LCL-PI141
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Viability:** .
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:01.011,24.02 , B: 08.01,15.17 , C: 07.011,07.011 , DRB: 03.01,16 , DQB: 02.01,02.01 ,DQA: 01.021,05.011

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C424
**Designation:** LCL-PI203
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:29.01,01.011 , B: 07.021,15.17 , C: 07.011, , DRB: 07,11 , DQB:

03.032,03.011 ,DQA: 02.01,05.05

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C425
**Designation:** LCL-PI1
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:03.011,68.011 , B: 08.01,15.17 , C: 13.01,07.011 , DRB: 03.01,16 , DQB: 02.01,02.01 ,DQA: 02.01,02.01

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C426
**Designation:** LCL-PI25
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,01.011 , B: 35.011,51.011 , , DRB: 04,04 , DQB: 03.02,03.02 ,DQA: 03.011,03.011

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the

information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C427
**Designation:** LCL-PI61
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy adult Iranian male.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

Molecular-HLA Typing : A:02.011,03.011 , B: 57.07,15.24 , C: 03.02,07.011 , DRB: 04,11 , DQB: 03.011,03.02 ,DQA: 03.011,05.05

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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# Human Genetic Disorders Collection

**NCBI Code:** C20001
**Designation:** LCL-IDDM-PI 290
**Sex:** Male
**Age at Sampling:** 55
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 55-year-old male.This LCL belongs to father of NCBI C20048 , C20049 and husband C20050. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 97%, 6 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C20002
**Designation:** LCL-IDDM-PI291
**Sex:** Female
**Age at Sampling:** 46
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 46-year-old female affected with IDDM.This LCL belongs to mother of NCBI C20051 and wife of C20052.Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 93%, 7 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20003
**Designation:** LCL-IDDM-PI292
**Sex:** Male
**Age at Sampling:** 15
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 15-year-old male. This LCL belongs to brother of NCBI Code C20004 and C20005. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 94%, 6 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20004
**Designation:** LCL-IDDM-PI293
**Sex:** Male
**Age at Sampling:** 13

**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 13-year-old male affected with IDDM.This LCL belongs to brother of NCBI Code C20003 and C20005. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 96%, 7 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20005
**Designation:** LCL-IDDM-PI294
**Sex:** Female
**Age at Sampling:** 17
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 17-year-old female affected with IDDM.This LCL belongs to sister of NCBI Code C20003 and C20004. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 98%, 10 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20006
**Designation:** LCL-IDDM-PI295
**Sex:** Female
**Age at Sampling:** 58
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 58-year-old female.This LCL belongs to mother of NCBI Code C20007 , C20008 ,C20009 , C20011 and belongs to wife of NCBI Code C20010. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 90%, 4.5 x 10^6 cells/vial

**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20007
**Designation:** LCL-IDDM-PI296
**Sex:** Female
**Age at Sampling:** 32
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 32-year-old female affected with IDDM. This LCL belongs to daughter of NCBI Code C20006 (mother),C20010 (father) and sister of NCBI Code C20008 , C20009 , C20011. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 96%, 5 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20008
**Designation:** LCL-IDDM-PI297
**Sex:** Female
**Age at Sampling:** 38
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 38-year-old female. This LCL belongs to daughter of NCBI Code C20006 (mother),C20010 (father)and sister of NCBI Code C20007 , C20009 , C20011. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 90%, 6 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a

guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20009
**Designation:** LCL-IDDM-PI298
**Sex:** Male
**Age at Sampling:** 20
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 20-year-old male affected with IDDM.This LCL belongs to son of NCBI Code C20006 (mother),C20010 (father) and brother of NCBI Code C20007 , C20008 , C20011. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 100%, 5 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20010
**Designation:** LCL-IDDM-PI299
**Sex:** Male
**Age at Sampling:** 68
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 68-year-old male. This LCL belongs to husband of NCBI Code C20006 and father of NCBI Code C20007,C20008,C20009,C20011. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 95%, 4.5 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20011
**Designation:** LCL-IDDM-PI300
**Sex:** Male
**Age at Sampling:** 29
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 29-year-old male. This LCL belongs to son of NCBI Code C20006(mother), C20010 (father) and brother of NCBI Code C20007, C20008, C20009. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 95%, 7 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20012
**Designation:** LCL-IDDM-PI305
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian male. This LCL belongs to father of NCBI Code C20013,C20018,C20053 and husband of C20019. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 90%, 7 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20013
**Designation:** LCL-IDDM-PI306
**Sex:** Male
**Age at Sampling:** 21
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 21-year-old male affected with IDDM. This LCL belongs to son of NCBI Code C20012 (father) , C20019 (mother) and brother C20018,

C20053. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 95%, 6 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20014
**Designation:** LCL-IDDM-PI301
**Sex:** Male
**Age at Sampling:** 38
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 38-year-old male. This LCL belongs to father of NCBI Code C20016,C20017 and husband of C20015. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 95%, 4.5 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20015
**Designation:** LCL-IDDM-PI302
**Sex:** Female
**Age at Sampling:** 33
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 33-year-old female. This LCL belongs to mother of NCBI Code C20016, C20017 and wife of C20014. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 95%, 7 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where

the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20016
**Designation:** LCL-IDDM-PI303
**Sex:** Female
**Age at Sampling:** 13
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 13-year-old female affected with IDDM. This LCL belongs to daughter of NCBI C20014(father) , C20015(mother) and sister C20016. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 95%, 9 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20017
**Designation:** LCL-IDDM-PI304
**Sex:** Male
**Age at Sampling:** 7
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 7-year-old male affected with IDDM. This LCL belongs to son of NCBI Code C20014(father) , C20015(mother) and brother C20016. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 95%, 8 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20018
**Designation:** LCL-IDDM-PI307
**Sex:** Male
**Age at Sampling:** 17
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 17-year-old male affected with IDDM. This LCL belongs to son of NCBI Code C20012 (father) , C20019 (mother) and brother C20013 and sister C20053. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 95%, 5.3 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20019
**Designation:** LCL-IDDM-PI308
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian female. This LCL belongs to wife of NCBI Code C20012 and mother C20013 , C20018 , C20053. Compelet pedigree is available in NCBI and may be provided upon request.
**DNA available:** No
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 90%, 6 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20020
**Designation:** LCL-IDDM-PI309
**Sex:** Female
**Age at Sampling:** 39
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 39-year-old female affected with IDDM. This LCL

belongs to causine of NCBI Code C20021.Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 92%, 7x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20021
**Designation:** LCL-IDDM-PI310
**Sex:** Female
**Age at Sampling:** 70
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 70-year-old female affected with IDDM. This LCL belongs to aunt of NCBI Code C20020. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 93%, 5 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20022
**Designation:** LCL-IDDM-PI311
**Sex:** Female
**Age at Sampling:** 45
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 70-year-old female affected with IDDM. This LCL belongs to mother of NCBI Code C20023. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 90%, 6 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide

sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20023
**Designation:** LCL-IDDM-PI312
**Sex:** Female
**Age at Sampling:** 19
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 19-year-old female affected with IDDM. This LCL belongs to daughter of NCBI Code C20022. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 100%, 6 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20024
**Designation:** LCL-IDDM-PI313
**Sex:** Female
**Age at Sampling:** 49
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 49-year-old female. This LCL belongs to wife of NCBI Code C20025 and mother C20028 , C20029 and C20054. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 100%, 5 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C20025
**Designation:** LCL-IDDM-PI314
**Sex:** Male
**Age at Sampling:** 48
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 48-year-old male. This LCL belongs to husband of NCBI Code C20024 and father C20028,C20029,C20054. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 89%, 12 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20026
**Designation:** LCL-IDDM-PI315
**Sex:** Male
**Age at Sampling:** 73
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 73-year-old male. This LCL belongs to father of NCBI Code C20027. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 92%, 4 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20027
**Designation:** LCL-IDDM-PI316
**Sex:** Female
**Age at Sampling:** 40
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral

blood lymphocytes of a healthy Iranian 40-year-old female. This LCL belongs to daughter of NCBI Code C20026. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 95%, 10 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20028
**Designation:** LCL-IDDM-PI317
**Sex:** Male
**Age at Sampling:** 24
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 24-year-old male affected with IDDM.This LCL belongs to son of NCBI Code C20025(father) ,C20024(mother) and brother C20029, 20054. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 95%, 5 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20029
**Designation:** LCL-IDDM-PI318
**Sex:** Male
**Age at Sampling:** 14
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 14-year-old male affected with IDDM. This LCL belongs to son of NCBI Code C20025(father), C20024(mother) and brother C20028,C20054. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 93%, 5 x 10^6 cells/vial
**Depositor:** Originated in NCBI

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20030
**Designation:** LCL-IDDM-PI319
**Sex:** Male
**Age at Sampling:** 18
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 18-year-old male. This LCL belongs to son of NCBI Code C20034(father) ,C20031(mother) and brother C20032,C20033.Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 71%, 5 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20031
**Designation:** LCL-IDDM-PI320
**Sex:** Female
**Age at Sampling:** 41
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 41-year-old female. This LCL belongs to wife of NCBI Code C20034 and mother C20033,C20032,C20030. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 93%, 6 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C20032
**Designation:** LCL-IDDM-PI321
**Sex:** Male
**Age at Sampling:** 21
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 21-year-old male affected with IDDM. This LCL belongs to son of NCBI Code C20034(father),C20031(mother) and brother C20033,C20030. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 85%, 5 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20033
**Designation:** LCL-IDDM-PI322
**Sex:** Male
**Age at Sampling:** 9
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 9-year-old male affected with IDDM. This LCL belongs to son of NCBI Code C20034(father) ,C20031(mother) and brother C20030,C20032. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 93%, 4 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20034
**Designation:** LCL-IDDM-PI323
**Sex:** Male
**Age at Sampling:** 51

**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 51-year-old male. This LCL belongs to husband of NCBI Code C20031 and father C20031,C20032,C20033. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 83%, 5 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20035
**Designation:** LCL-IDDM-PI324
**Sex:** Female
**Age at Sampling:** 15
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 15-year-old female. This LCL belongs to daughter of NCBI Code C20038(father) and sister C20036 ,C20037. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 90%, 4 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20036
**Designation:** LCL-IDDM-PI325
**Sex:** Male
**Age at Sampling:** 12
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 12-year-old male affected with IDDM. This LCL belongs to son of NCBI Code C20038 and brother C20035,C20037. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20037
**Designation:** LCL-IDDM-PI326
**Sex:** Male
**Age at Sampling:** 16
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 16-year-old male. This LCL belongs to son of NCBI Code C20038 and brother C20035,C20036. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20038
**Designation:** LCL-IDDM-PI327
**Sex:** Male
**Age at Sampling:** 34
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 34-year-old male. This LCL belongs to father of NCBI Code C20035,C20036,C20037. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 85%, 58* 10^6 cells
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C20039
**Designation:** LCL-IDDM-PI328
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian male. This LCL belongs to husband of NCBI Code C20040 and father C20055 , C20056. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Viability:** 93%, 6 x 10^6 cells/vial
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20040
**Designation:** LCL-IDDM-PI329
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian female. This LCL belongs to wife of NCBI Code C20039 and mother C20055 , C20056. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20041
**Designation:** LCL-IDDM-PI 258
**Sex:** Male
**Age at Sampling:** 53
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 53-year-old male.This LCL belongs to husband of NCBI Code C20042 and father C20062 , C20063. Compelet pedigree is available in NCBI and may be provided upon request.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20042
**Designation:** LCL-IDDM-PI 259
**Sex:** Female
**Age at Sampling:** 52
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 52-year-old female.This LCL belongs to wife of NCBI Code C20041 and mother C20062 , C20063. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20043
**Designation:** LCL-IDDM-PI 260
**Sex:** Female
**Age at Sampling:** 12
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 12-year-old female affected with IDDM.This LCL belongs to sister of NCBI Code C20062 , C20065 , C20066. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** C20044
**Designation:** LCL-IDDM-PI 268
**Sex:** Male
**Age at Sampling:** 39
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 39-year-old male.This LCL belongs to husband of NCBI Code C20047 and father C20045,C20046. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20045
**Designation:** LCL-IDDM-PI 269
**Sex:** Female
**Age at Sampling:** 10
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 10-year-old female affected with IDDM.This LCL belongs to daughter of NCBI Code C20044(father),C20047(mother) and sister C20046. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20046
**Designation:** LCL-IDDM-PI 270
**Sex:** Female
**Age at Sampling:** 6
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 6-year-old female affected with IDDM.This LCL belongs to

daughter of NCBI Code C20044(father),C20047(mother) and sister C20045. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20047
**Designation:** LCL-IDDM-PI 271
**Sex:** Female
**Age at Sampling:** 36
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 36-year-old female.This LCL belongs to wife of NCBI Code C20044 and mother C20046,C20045. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information. The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20048
**Designation:** LCL-IDDM-PI 287
**Sex:** Male
**Age at Sampling:** 19
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 19-year-old male affected with IDDM.This LCL belongs to son of NCBI Code C20001(father) , C20050(mother) and brother C20049. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20049
**Designation:** LCL-IDDM-PI 444
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian male affected with IDDM.This LCL belongs to son of NCBI Code C20001(father) , C20050(mother) and brother C20048. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20050
**Designation:** LCL-IDDM-PI 445
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian female.This LCL belongs to wife of NCBI Code C20001 and mother C20048,C20049. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20051
**Designation:** LCL-IDDM-PI 288
**Sex:** Male
**Age at Sampling:** 28

**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 28-year-old male affected with IDDM.This LCL belongs to son of NCBI Code C20052(father) , C20002(mother). Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20052
**Designation:** LCL-IDDM-PI 289
**Sex:** Male
**Age at Sampling:** 53
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 53-year-old male.This LCL belongs to husband of NCBI Code C20002 and father C20051. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20053
**Designation:** LCL-IDDM-PI 450
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian female affected with IDDM.This LCL belongs to daughter of NCBI Code C20012(father) , C20019(mother) and sister C20013,C20018. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

**NCBI Code:** C20054
**Designation:** LCL-IDDM-PI 440
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian male affected with IDDM.This LCL belongs to son of NCBI Code C20025(father) , C20024(mother) and brother C20028,C20029. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20055
**Designation:** LCL-IDDM-PI 330
**Sex:** Female
**Age at Sampling:** 10
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 10-year-old female affected with IDDM.This LCL belongs to daughter of NCBI Code C20039(father) , C20040(mother) and sister C20056. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20056
**Designation:** LCL-IDDM-PI 331
**Sex:** Male
**Age at Sampling:** 9
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 9-year-old male affected with IDDM.This LCL belongs to son of NCBI Code C20039(father) , C20040(mother) and brother C20055.Compelet pedigree is available in NCBI and maybe provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.

**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20057
**Designation:** LCL-IDDM-PI 284
**Sex:** Male
**Age at Sampling:** 51
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 51-year-old male.This LCL belongs to husband of NCBI Code C20059 and father C20058,C20060,C20061. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20058
**Designation:** LCL-IDDM-PI 443
**Sex:** Male
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian male affected with IDDM.This LCL belongs to son of NCBI Code C20057(father) , C20059(mother) and brother C20060,C20061. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20059
**Designation:** LCL-IDDM-PI 421

**Sex:** Female
**Age at Sampling:** 46
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 46-year-old female.This LCL belongs to wife of NCBI Code C20057 and mother C20058,C20060,C20061. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20060
**Designation:** LCL-IDDM-PI 285
**Sex:** Female
**Age at Sampling:** 21
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian 21-year-old female.This LCL belongs to daughter of NCBI Code C20057(father) , C20059(mother) and sister C20058,C20061. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20061
**Designation:** LCL-IDDM-PI 286
**Sex:** Male
**Age at Sampling:** 16
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 16-year-old male affected with IDDM.This LCL belongs to son of NCBI Code C20057(father) , C20059(mother) and brother C20058,C20060. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where

the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20062
**Designation:** LCL-IDDM-PI 437
**Sex:** Female
**Age at Sampling:** 25
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian female affected with IDDM.This LCL belongs to daughter of NCBI Code C20041(father) , C20042(mother) and sister C20063. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20063
**Designation:** LCL-IDDM-PI 446
**Sex:** Female
**Age at Sampling:** 29
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian female affected with IDDM.This LCL belongs to daughter of NCBI Code C20041(father) , C20042(mother) and sister C20062. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20064
**Designation:** LCL-IDDM-PI 401
**Sex:** Male
**Age at Sampling:** 33

**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian male affected with IDDM.This LCL belongs to brother of NCBI Code C20043, C20065,C20066. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20065
**Designation:** LCL-IDDM-PI 447
**Sex:** Male
**Age at Sampling:** 30
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of a healthy Iranian male.This LCL belongs to brother of NCBI Code C20043 ,C20064,C20066. Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

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**NCBI Code:** C20066
**Designation:** LCL-IDDM-PI 427
**Sex:** Female
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian female affected with IDDM.This LCL belongs to sister of NCBI Code C20043, C20064,C20065.Compelet pedigree is available in NCBI and may be provided upon request.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**Depositor:** Originated in NCBI
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide.

**NCBI Code:** C20067
**Designation:** LCL PI 15
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 15-year-old female affected with Hyper-IgM syndrome.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml. **Sterility:** Tests for bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| |
|---|
| **27** |
| **46** |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20068
**Designation:** LCL PI 16
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 15-year-old male affected with Hyper-IgM syndrome.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml
**Sterility:** Tests for bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \|30 |
|---|
| 45\|46 |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20069
**Designation:** LCL PI 17
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 15-year-old male affected with Common Variable Immunodeficiency.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Isoenzymes:** LDH
**Sterility:** Tests for bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 2 \| 2 \|25\| 1 |
|---|
| 42\|45\|46\|48 |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20070
**Designation:** LCL PI 24
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian21-year-old female affected with Common Variable Immunodeficiency.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml. **Sterility:** Tests for bacteria and fungi were negative **Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| |
|---|
| **1 \|29** |
| **44\|46** |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20071
**Designation:** LCL PI 43
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 23-year-old female affected with Common Variable Immunodeficiency.
**Culture Medium:** RPMI 1640 + 10% FBS

**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml. **Sterility:** Tests for bacteria and fungi were negative. **Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| |
|---|
| **1 \| 1 \|28** |

| 44\|45\|46 |
|---|

**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20072
**Designation:** LCL PI 44
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 8-year-old female affected with Hyper-IgM syndrome.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Isoenzymes:** LDH
**Sterility:** Tests for bacteria and fungi were negative
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|28\| 1 |
|---|
| 45\|46\|47 |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20073
**Designation:** LCL PI 50
**Species:** Human
**Tissue:** Hematopoietic

**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 10-year-old male affected with Common Variable Immunodeficiency.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml. **Sterility:** Tests for bacteria and fungi were negative
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **2 \|28** |
|---|
| **45\|46** |

**Viability:** 99%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20074
**Designation:** LCL-PI 54
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 23-year-old female affected with Common Variable Immunodeficiency.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative
**DNA Typing:**

| CSF1PO: | FGA: | TH01: | TPOX: | VWA: | D3S1358: | D5S818: | D7S820: | D8S1179: | D13S317: | D16S539: | D18S51: | D21S11: | AMEL: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 22 | 6 | 7,11 | 16,17 | 15,18 | 9,12 | 8,9 | 10,14 | 8,9 | 8 | 11,13 | 27 | X |

**Viability:** 98%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20075
**Designation:** LCL PI 64
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian male affected with Common Variable Immunodeficiency.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.
**Viability:** 96%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20076
**Designation:** LCL PI 69
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 8-year-old male affected with Common Variable Immunodeficiency.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.

**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|21\| 1 |
|---|
| 45\|46\|74 |

**Viability:** 90%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20077
**Designation:** LCL PI 90
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 6-year-old male affected with Common Variable Immunodeficiency.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml. **Sterility:** Tests for bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 1 \|29 |
|---|
| 45\|46 |

**Viability:** 98%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20078
**Designation:** LCL PI 186
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 13-year-old male affected with Common Variable Immunodeficiency.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **2 \|28\| 2** |
|---|
| **45\|46\|92** |

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20079
**Designation:** LCL PI 196
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 9-year-old male affected with Common Variable Immunodeficiency. **Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| **30** |
|---|

| 46 |
|---|

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20080
**Designation:** LCL PI 201
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 3-year-old male affected with IgA Defficiency syndrome**.**
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| 26\| 2 \| 1 \| 1 |
|---|
| 46\|48\|49\|92 |

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20081
**Designation:** LCL PI 202
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian 10-year-old female affected with Common Variable

Immunodeficiency.
**Culture Medium:** RPMI 1640 + 10% FBS.
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **1** | **1** | **1** | **3** | **10** | **1** | **2** | **1** |
| **28** | **40** | **44** | **45** | **46** | **47** | **48** | **52** |

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** C20082
**Designation:** LCL PI 205
**Species:** Human
**Tissue:** Hematopoietic
**Morphology:** Lymphoblast-like
**Description:** This is an EBV transformed lymphoblastoid cell line derived from the peripheral blood lymphocytes of an Iranian male affected with Ataxia Telangiectasia.
**Culture Medium:** RPMI 1640 + 10% FBS
**Preservation Medium:** FBS + 10% DMSO
**Subculture Routine:** split saturated culture 1:2 to 1:3 every second day; maintain at about 0.5-1 x 106 cells/ml.
**Sterility:** Tests for bacteria and fungi were negative.
**Karyology:** 2n=46
**Chromosome Frequency Distribution (Cells /Chromosomes):**

| | | | | |
|---|---|---|---|---|
| **1** | **1** | **28** | | |
| **44** | **45** | **46** | | |

**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

# Stem Cell Collection

**NCBI Code:** ES1
**Designation:** MUKF3
**Species:** mouse blastocyst
**Tissue:** Embryo Body(EB) spheroid but it makes clumps
**Morphology:** Embryo Body(EB) spheroid but it makes clumps
**Description:** cell line has been isolated from C57BL/6 mouse blastocyst which is the most standard strain in mouse genetics
**Culture Medium:** This cell line grown on mitotically inactivated mouse embryonic fibroblast (MEF) feeder + DMEM/F12 medium+15% ESC – qualified fetal calf serum + 0.1mM β- mercaptoethanol + 0.1mμnonessential amino acids + 1000 units/ml leukemia inhibitory factor+ 1mμ Sodium pyruvate+2 mM L-glutamine+100 units/ml penicillin + 100μg/ml streptomycin
**Preservation Medium:** embryonic culture + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3, ie seeding at 2 cells/60mm$^{2}$^5 using 0.05% trypsin /0.5 mM EDTA,5%CO2,37 Ć
**Characterize:** ICC , PCR and AL-P for pluripotent characterize were positive.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** -
**Reference:** Ali Ghanbari, MozafarKhazaei, Mahmoodhashemitabar,ArezoRabziamFardinFathi,Parvin-dokhtBayat. Sonic hedgehog inhibition induce mouse embryonic stem cells to differentiate toward definitive endoderm. Indian journal of Experimental Biology.2013: 51;201-207.
**Viability:** 98%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** ES2
**Designation:** ES-C57BL/6
**Species:** C57BL/6J (B6) Mouse
**Tissue:** Embryo
**Morphology:** Spherical colony
**Description:** The clonal embryonic stem cell line #693 ES C57BL/6 was derived from a strain C57BL/6J (B6) mouse blastocyst. The ES cells were shown to populate the germ line of two host blastocyst donors, FVB/NJ (FVB) and the coisogenic strain C57BL/6-Tyrc-2J (c2J). Coat-

color chimera production was high using c2J blastocysts while FVB blastocysts produced a low number of chimeras.
**Culture Medium:** Knockout DMEM (85%), Es qualified FBS (12%), NEAA (MEM) (1%), L-Gutomin (1%), Penicillin/Streptomycin (1%), 2ME (0.01%)
**Preservation Medium:** ES qualified DMSO
**Subculture Routine:** Establishing and maintaining your culture:
To insure the highest level of viability, be sure to warm media to 37ºC before using it on the cells.

1. Plate mitotically arrested MEF (CF-1) as a feeder layer at least one day before plating the cells (see product sheet for mitotically arrested MEF for protocol). One hour before thawing the vial of cells, perform a 100% medium change using 4 ml of complete ES-DMEM.
2. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 90 seconds).
3. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions.
4. Transfer the vials contents plus 5 ml of complete ES-DMEM to a 15 ml centrifuge tube. Use an additional 1 ml of media to rinse the vial and transfer the liquid to the 15 ml tube. Add 4 ml of complete ES-DMEM to bring the total volume to 10 ml.
5. Spin the cells at 270 x g for 5 min. Aspirate the supernatant and resuspend the pellet in 5 ml of complete ES-DMEM.
6. Add the 5 ml of cell suspension to the T75 flask containing feeder cells and 10 ml complete ES-DMEM.
7. Incubate the culture at 37°C in a humidified 5% CO2/95% air incubator. Perform a 100% medium change every day, passage cells every 1 to 2 days.
   Subcultivation Ratio: A subcultivation ratio of 1:4 to 1:7 is recommended. Medium Renewal: Every day air. Atmosphere: air, 95%; carbon dioxide (CO2), 5% Temperature: 37.0°C
   **Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
   **ATCC Number:** SCRC-1002
   **ECACC Number: -**
   **Reference:** Brook FA, et al. The derivation of highly germline-competent embryonic stem cells containing NOD-derived genome. Diabetes. 52:205-208, 2003.
   Brook FA, Gardner RL. The origin and efficient derivation of embryonic stem cells in the mouse. Proc. Natl. Acad. Sci. USA. 94: 5709-5712, 1997.
   **Viability:** 98%
   **Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

**NCBI Code:** ES3
**Designation:** MUK F-1
**Species:** mouse blastocyst
**Tissue:** Inner Cells Mass (ICM) embryonic stem cell
**Morphology:** Embryo Body(EB) spheroid but it makes clumps
**Description:** cell line has been isolated from C57BL/6 mouse blastocyst which is the most standard strain in mouse genetics**.**
**Culture Medium:** This cell line grown on mitotically inactivated mouse embryonic fibroblast (MEF) feeder + Knock out DMEM medium+20% FBS + 100uM mercaptoethanol + 0.1mµnonessential amino acids + 10 ng/mL leukemia inhibitory factor+ 1mµ Sodium pyruvate
**Preservation Medium:** embryonic culture + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3, ie seeding at 5 cells/cm^4 using 0.1% trypsin /EDTA,5%CO2,37 Ć
**Characterize:** ICC , PCR and AL-P for pluripotent characterize were positive.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** -
**Reference:** -
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** ES4
**Designation:** MUK F-2
**Species:** mouse blastocyst
**Tissue:** Inner Cells Mass (ICM) embryonic stem cell
**Morphology:** Embryo Body(EB) spheroid but it makes clumps
**Description:** cell line has been isolated from C57BL/6 mouse blastocyst which is the most standard strain in mouse genetics
**Culture Medium:** This cell line grown on mitotically inactivated mouse embryonic fibroblast (MEF) feeder + Knock out DMEM medium+20% FBS + 100uM mercaptoethanol + 0.1mµnonessential amino acids + 10 ng/mL leukemia inhibitory factor+ 1mµ Sodium pyruvate.
**Preservation Medium:** embryonic culture + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3, ie seeding at 5 cells/cm^4 using 0.1% trypsin /EDTA,5%CO2,37 Ć
**Characterize:** ICC , PCR and AL-P for pluripotent characterize were positive.

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** -
**Reference:** -
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** ES5
**Designation:** MUK F $GFP^{+}$
**Species:** Mouse
**Tissue:**
**Morphology:**
**Description:** Normal
**Culture Medium:** DMEM HighGlucose + 20% FBS + NEAA + Sodium Pyruvate + 2-mercaptoethanol + LIF
**Preservation Medium:**
**Subculture Routine:**
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:**
**ECACC Number:**
**Reference:**
**Viability:**
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** ES6
**Designation:** NT2(NTERA2 clD1)
**Species:** Human
**Tissue:** embryonal carcinoma (testis malignant)
**Morphology:** fibroblast - Like
**Description:** derived from human teratocarcinoma, exhibits similar properties as embryonic stem (ES) cells

**Culture Medium:** DMEM medium(4500 mol/l glucose) +10% FBS + 100uM mercaptoethanol + 0.1mμnonessential amino acids + 1mμ Sodium pyruvate+100 units/ml penicillin + 100μg/ml streptomycin
**Preservation Medium:** DMEM + 20% FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 4 cells/each well of 6-wells^4using 0.25% trypsin /EDTA,5%CO2,37 Ć
**Characterize:** ICC and PCR were positive.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** -
**Reference:** Abbas JafariKermani, FardinFathi, and SeyedJavadMowla. Characterization and Genetic Manipulation of Human Umbilical Cord Vein Mesenchymal Stem Cells: Potential Application in Cell-based Gene Therapy. REJUVENATION RESEARCH. Volume 11, 10.1089 .2008.0674 .
**Viability:**
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** ES7
**Designation:** P19cl6
**Species**: Mouse
**Tissue:** embryonal carcinoma (EC)
**Morphology:** Epithelial-Like
**Description:** Embryonic Body (EB)isolated from murine P19 embryonic carcinoma cells by limiting dilution method
**Culture Medium:** DMEM High Glucose+FBS10% + 1%penicillin-streptomycin
**Preservation Medium:** DMEM + 20% FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 3.7 cells/cm^5 using 0.25% trypsin /EDTA,5%CO2,37 Ć
Characterize: ICC and PCR for pluripotent characterize were positive.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** -
**Reference:** FardinFathi , Satoshi Murasawa , Satoshi Hasegawa , Takayuki Asahara ,Abbas JafariKermani , SeyedJavadMowla Cardiac differentiation of P19CL6 cells by oxytocin. International Journal of Cardiology 134 (2009) 75–81.
**Viability:**
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the

cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** ES8
**Designation:** P19cl6(GFP+**)**
**Species**: Mouse
**Tissue:** embryonic carcinoma (EC) (GFP+)
**Morphology:** Epithelial-Like
**Description:** Embryonic Body (EB)isolated from murine P19 embryonic carcinoma cells by limiting dilution method
**Culture Medium:** DMEM (high .Glu)+ 10% FBS +100 Units/mlpenicillin+ 100 µg/ml streptomycin
**Preservation Medium:** DMEM + 20% FBS + 10% DMSO
**Subculture Routine:** Split confluent cultures 1:3 to 1:10, ie seeding at 8 cells/cm^4using 0.25% trypsin /EDTA,5%CO2,37 Ć.
**Characterize:** ICC and PCR for pluripotent characterize were positive.
**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** -
**Reference:** FardinFathi , Satoshi Murasawa , Satoshi Hasegawa , Takayuki Asahara ,Abbas JafariKermani , SeyedJavadMowla Cardiac differentiation of P19CL6 cells by oxytocin. International Journal of Cardiology 134 (2009) 75–81
**Viability:**
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.

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**NCBI Code:** ES9
**Designation:** C57BL6
**Species**: Mouse
**Tissue:** -
**Morphology:** -
**Description:** Normal
**Culture Medium:** DMEM High Glucose+FBS10%
**Preservation Medium:** -
**Subculture Routine:** -

**Sterility:** Tests for mycoplasma, bacteria and fungi were negative.
**ATCC Number:** -
**ECACC Number:** -
**Reference:** -
**Viability:** 95%
**Comments:** The cell lines and hybridomas in NCBI are obtained from local and world-wide sources. The quoted information are partly provided by the depositors or the cell banks where the cells were obtained from; therefore, these sources are responsible for validity of the information. Passage numbers are given when applicable and should only be considered as a guide. Hence, NCBI does not guarantee that the passage numbers of the cells the customers will receive are exactly the ones provided in the information.