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# **Einstufung von Organismen: Zelllinien**

## Entwurf 2007

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## **Einstufung von Organismen: Zelllinien. 2007**

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### **Entstehung der Liste**

Die SKBS publizierte im August 1995 in ihren Richtlinien für das Arbeiten mit gentechnisch veränderten Organismen Listen häufig verwendeter Zellen und Zelllinien und ihre Einteilung in die Risikogruppen 1 – 3. In der Zwischenzeit hat nicht nur die Anzahl der verwendeten Zelllinien sondern auch das Wissen über diese Zellen massiv zugenommen. Damit hat sich eine Überarbeitung und Ergänzung der SKBS-Listen aufgedrängt. Auf Initiative des BAG wurden die Zelllinien, die im Rahmen von Meldungen und Bewilligungsgesuchen beim BAFU erfasst wurden, in einer Liste zusammengetragen. Für jede Zelllinie wurden Informationen zur Einstufung in kommerziellen Zellbanken (ATCC, ECACC, DSMZ, ICLC), Publikationen oder anderen Organismenlisten recherchiert und eine Einstufung in eine Gruppe vorgenommen. Experten der EFBS haben die Liste Anfang 2007 begutachtet. Weitere involvierte Fachstellen wurden im Rahmen einer Vernehmlassung im Frühling 2007 angehört.

### **Terminologie**

Die Bezeichnung der Zelllinien stützt sich auf die ATCC-Terminologie. Wo ATCC Synonyme aufführt, wurden diese ebenfalls übernommen. Wenn weder bei ATCC, DSMZ, ECACC noch ICLC Informationen verfügbar sind, wird auf eine Publikation verwiesen. In einigen wenigen Fällen sind Zelllinien ohne Informationsangabe eingestuft, wobei in diesen Fällen die Einstufung von der ZKBS oder der SKBS von 1995 übernommen wurde.

### **Abweichungen zu anderen Listen**

Abweichungen zur Einstufung in der SKBS-Liste 1995 oder in europäischen Listen erklären sich aus dem aktuellen Stand des Wissens, den die Autoren bemüht waren einzuholen. Ebenso sind Abweichungen von den Empfehlungen ATCC möglich. Die ATCC empfiehlt BSL2, sobald Fremdgenomanteile (z.B. EBV oder SV40) nachgewiesen sind, auch wenn keine Viruspartikel gebildet oder ausgeschieden werden. Für die vorliegende Liste war die Produktion von Viruspartikeln die Voraussetzung für die Einstufung einer Zelle in die Gruppe 2.

### **Anwendung der Liste**

Die Liste ist eine Orientierungshilfe bei der Klassierung von Tätigkeiten und ersetzt die Risikobewertung nicht. Die angegebene Gruppenzuordnung bezieht sich auf Zelllinien, die aus einer „vertrauenswürdigen“ Quelle stammen und kann lediglich als Ausgangspunkt für die Risikobewertung und Klassierung einer Tätigkeit dienen. Der Verwender und die Verwenderin müssen für die Risikobewertung ihrer konkreten Tätigkeit weitere Faktoren berücksichtigen, wie mögliche bereits vorhandene Kontaminationen (Geschichte der Zellkultur), Kontaminationsmöglichkeiten im eigenen Labor (andere verwendete Organismen im Labor, Verwendung tierischen Serums im Nährmedium) und insbesondere die Konsequenzen, die sich im Zusammenhang mit ihrer beabsichtigten Tätigkeit ergeben könnten, wie z.B. die Rekombination mit Fragmenten von vorhandenen viralen Nukleinsäuresequenzen. Es sei daran erinnert, dass die Risikobewertung wiederholt werden muss, wenn eine Tätigkeit wesentlich ändert oder wesentliche neue Erkenntnisse vorliegen (Art. 8 ESV).

Referenz/Aktenzeichen: O391-2072

Für die Einstufung von Arbeiten mit etablierten Zelllinien und primären Zellkulturen verweisen wir auf die Richtlinien der Eidgenössischen Fachkommission für biologische Sicherheit (EFBS) für das Arbeiten mit Zellkulturen<sup>1</sup>.

#### **Links zu Informationsquellen**

ATCC <http://www.lgcpromochem-atcc.com>

ECACC <http://www.ecacc.org.uk>

DSMZ <http://www.dsmz.de>

ICLC <http://www.iclc.it>

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<sup>1</sup> EFBS 1999: Richtlinien für das Arbeiten mit Zellkulturen (<http://www.efbs.ch/imperia/md/content/efbs/53.pdf>)

Bezeichnung	Gruppe	Infos
293	1	Human kidney cell line, transformed with adenovirus 5 (E1A). Synonym: HEK-293 ATCC: CRL-1573
911	1	Human embryonic retinoblasts. Helper cell line containing Adenovirus 5 E1A gene. Synonym: HER911 Fallaux F.J. et al. 1996. Hum. Gene Ther. 7:215–22.
5637	1	Human urinary bladder carcinoma. DSMZ ACC 35
143B	1	Human osteosarcoma cell line. ATCC: CRL-8303
174xCEM	1	Hybrid of human B- and T-cell line.
17CL-1	1	Mouse fibroblast cell line.
1A2	2	Cell line producing EBV. ATCC: CRL-8119.
1G11	1	Mouse lung vascular endothelial cell line. Dong, Q. G. et al. 1997. Arterioscler. Thromb. Vasc. Biol. 17:1599-1604
208F	1	Rat fibroblast cell line. ECACC: 85103116
26CB-1	2	Cell line expressing a nuclear antigen similar to EBNA and carrying <i>Herpesvirus papis</i> . ATCC: CRL-1495
293 F	1	Derivative of 293, fast growing variant. Invitrogen.
293 H	1	Derivative of 293, with better adherence in monolayer culture. Invitrogen.
293-Cre	1	Derivative of 293, transformed with Cre recombinase. Invitrogen.
293-EBNA	1	Derivative of 293, expresses EBV EBNA-1-gene. Invitrogen. Bootcov M.R. et al. 1997. PNAS, 94:11514-11519.
293FT	1	Derivative of 293.
293T	1	Derivative of 293.
300-19	1	Mouse (NIH/Swiss) bone marrow cell line.
32D clone 3	1	Murine bone marrow cell line. ATCC: CRL-11346
3T3 Swiss albino	1	Murine embryonic fibroblast cell line. ATCC: CCL-92
3T3-10T1/2	1	Derivative of 3T3 Swiss albino.
3T3-F442	1	Derivative of 3T3 Swiss albino. ECACC: 00070654
3T3-L1	1	Derivative of 3T3 Swiss albino, not contact inhibited. ECACC: 86052701
3T6-Swiss albino	1	Murine embryonic fibroblast cell line. ATCC: CCL-96
4C8	1	Mouse glioma cell line. Weiner N.E. et al. 1999. J. Neuropathol. Exp. Neurol. 58 (1): 54–60.
5A HS MYC	1	Chinese hamster ovary cell line, overproduces mouse c-myc protein. Synonym: DUKX B1 ATCC: CRL-9010
A2.01	1	CD4-T-cell line, lymphoblastoid (NIBSC). Moutouh L. et al. 1998. J. Virol. 72: 8061-8072. Mondor I. et al. 1998 J. Virol. 72: 3623-3634
A3.01	1	CD4+T-cell line, lymphoblastoid (NIBSC). AIDS Research and Reference Reagent Program (U.S. Department of Health and Human Services, NIH).
A-10	1	Mouse thoracic aorta cell line. ATCC: CRL-1476
A-172	1	Human glioma cell line. ATCC: CRL-1620
A20	1	Murine B-lymphocytes, reticulum cell sarcoma. Synonym: A-20. ATCC: TIB-208
A-20	1	Murine B-lymphocytes, reticulum cell sarcoma. Synonym: A20. ATCC: TIB-208

Bezeichnung	Gruppe	Infos
A375	1	Human malignant melanoma cell line. Synonym: A-375. ATCC: CRL-1619
A-375	1	Human malignant melanoma cell line. Synonym: A375. ATCC: CRL-1619
A-431	1	Human epidermoidal carcinoma cell line. ATCC CRL-1555
A549	1	Human lung carcinoma cell line. ATCC: CCL-185
A6	1	Xenopus kidney cell line. ATCC: CCL-102
A7r5	1	Rat thoracic aorta cell line, smoth muscle. ATCC: CRL-1444
AG11395	1	Human fibroblast cell line (Werner Syndrome). Synonym: WS780. Coriell Cell Repositories
AmphoPack-293	1	Derivative of 293. Clontech.
ARPE-19	1	Human retinal pigmented epithelium. ATCC: CRL-2302
AsPC-1	1	Human pancreatic adenocarcinoma cell line. ATCC: CRL-1682
AtT-20	1	Murine pituary tumor cell line. ATCC: CCL-89
AU565	1	Human breast adenocarcinoma cell line. Synonym: AU-565. ATCC: CRL-2351
AU-565	1	Human breast adenocarcinoma cell line. Synonym: AU565. ATCC: CRL-2351
B16-F0	1	Murine melanoma cell line. ATCC: CRL-6322
B95-8	2	Monkey Marmoset peripheral blood lymphocyte, producing high titers of EBV. ECACC: 85011419
Ba/F3	1	Murine myelo-lymphoid cell line. DSMZ: ACC 300
Ba/F3 wt	1	Ba/F3: IL-3-dependent mouse pro-B-cell line. Palacios R. and M. Steinmetz 1985. Cell 41:727-734
BAEC	1	Bovine aorta epithel cells. <a href="http://www.biotech.ist.unige.it">http://www.biotech.ist.unige.it</a>
BALB-T3T clone A31	1	Murine embrionic fibroblast cell line. ATCC: CCL-163
BC16A	1	Murine leukemia cell line, spleen. ATCC: TIB-59
BC3A	1	Murine leukemia cell line, spleen. ATCC: TIB-60
BCE	1	Bovine capillary endothelial cell line. ATCC: CRL-2048
BEL	1	Human fibroblast skin. ATCC: CRL-1179
BEL-26	1	Bovine cell line. Intervet BV, Boxmeer, The Netherlands
b-END.5	1	Mouse brain endothelial cell line. ECACC: 96091926
Beta-TC-6	1	Mouse pancreatic beta tumor cell line. ATCC: CRL-11506
Bhas 42	1	Mouse fibroblasts, contains defective retroviral genome.
BHK-21	1	Hamster kidney cell line. ATCC: CCL-10
BHK-T7	1	Hamster kidney cell line.

Bezeichnung	Gruppe	Infos
BLK CL.4	1	Murine fibroblast cell line. ATCC: TIB-81
Bm5	1	Silkworm ( <i>Bombyx mori</i> ) cell line
Bm-N	1	Silkworm ( <i>Bombyx mori</i> ) cell line ATCC: CRL-8910
BNL CL.2	1	Murine liver cell line. ATCC: TIB-73
BOSC-23	1	Human kidney epithel cells, ecotropic packaging cell line. Pear W.S: <i>et al.</i> 1993. PNAS 90:8392-6
BRL 3A	1	Rat liver cell line. ATCC: CRL-1442
BS-C-1	1	African green monkey kidney cell. ATCC: CCL-26
BSC40	1	African green monkey kidney epithelial cell line. Synonym: BSC-40 ATCC: CRL-2761
BSC-40	1	African green monkey kidney epithelial cell line. Synonym: BSC40 ATCC: CRL-2761
BSR-T7	1	Hamster kidney cell line.
BT	1	Bovine turbinate cell line. ATCC: CRL-1390
BT-474	1	Human breast ductual carcinoma cell line. ATCC: HTB-20
C1, C2	1	Mouse myoblast cell line.
C1271	1	Mouse mammary tumor cell line.
C2C12	1	Murine myoblast cell line. ATCC: CRL-1772
C-33 A	1	Human carcinoma cell line. ATCC: HTB-31
C3H/10T1/2	1	Mouse pluripotent stem cells. ATCC: CCL-226
C4-1	1	Human cervix carcinoma cell line.
C4-II	1	Human cervix carcinoma cell line.
C6	1	Rat glioma cell line. ATCC: CCL-107
C6/36	1	Mosquito ( <i>Aedes albopictus</i> ) cell line. ATCC: CRL-1660
C8166	2	Human T-cell leukemia cell line containing defective HTLV-1 genome. ECACC 88051601
Caco-2	1	Human colorectal adenocarcinoma cell line. ATCC: HTB-37
CaPi	1	Carp pituitary cell line.
CCB	1	Carp brain cell line.
CCD-18Co	1	Human colon cell line. ATCC: CRL-1459
CCD-33Co	1	Human colon cell line. ATCC CRL-1539
CEM	1	Human lymphoblastic cell line (acute leukemia). ATCC: CCL-119
CESS	2	Human lymphoblast cell line (myelomonocytic leukemia) producing EBV. ATCC: TIB-190
CHL	1	Chinese hamster lung fibroblast cell line. ATCC: CCL-39. ECACC: 87111906
CHO	1	Chinese hamster ovary cell line. ATCC: CRL-9606
CHO-9	1	Chinese hamster ovary cell line. Mutant of CHO-K1(ECACC 85051005). Fudyk T. <i>et al.</i> 2002. Infection and Immunity 70: 6444-6447
CHO-DUX B11	1	Chinese hamster ovary cell line. Urlaub A. and L. Chasin 1980. PNAS 77: 4216-4220

Bezeichnung	Gruppe	Infos
CHO-K1	1	Chinese hamster ovary cell line. ATCC: CCL-61
CHSE-214	1	Salmon embryonic cell line. ATCC: CRL-1681
CL-S1	2	Mouse mammary carcinoma cell line producing A- and C-oncovirus. ECACC: 90110502
CMT-93	1	Mouse rectum carcinoma cell line. ATCC: CCL-223
COGA5	1	Human colon cancer cell line.
COS-1	1	African green monkey kidney cell line. ATCC: CRL-1650
COS-7	1	African green monkey kidney cell line. ATCC: CRL-1651
CPA-47	1	Bovine vascular endothelium cell line. ATCC: CRL-1733
CRE	1	Mouse fibroblast cell line.
CRFK	1	Cat kidney epithelial cell line. ATCC: CCL-94
CRIP	1	Mouse fibroblast cell line.
CTLL2	1	Mouse cytotoxic T-Lymphocyte cell line. ATCC: TIB-214
CV-1	1	African green monkey kidney epithelial cell line. ATCC: CCL-70
D17	1	Canine osteosarcoma cell line. ATCC: CRL-6248
D1B	1	Murine leukemia cell line. ATCC: TIB-56
D2N	1	Murine leukemia cell line. ATCC: TIB-58
D3	1	Mouse hybridoma cell line. DSMZ: ACC 428 Caution: ATCC uses "D3" as a synonym for ES-D3 cell line (CRL-11632) that are not identical to DSMZ ACC 428.
D341 MED	1	Human brain medulloblastoma cell line. ATCC: NTB-187
Daoy	1	Human desmoplastic cerebellar medulloblastoma cell line. ATCC: HTB-186
Daudi	2	Human B-lymphoblast cell line (Burkitt's lymphoma). ATCC: CCL-213
Dede	1	Chinese hamster lung fibroblast cell line. ATCC: CCL-39
DG-75	2	Human Burkitt's lymphoma cell lines producing EBV. DSMZ: ACC 83
DLD-1	1	Human colorectal adenocarcinoma cell line. ATCC: CCL-221
DoCI 1	2	Cell line producing murine sarcoma virus.
DOHH-2	1	Human B-cell-lymphoma cell line.
DPSD 114/74	2	Cell line producing squirrel-monkey virus.
DU 145	1	Human prostate carcinoma cell line. ATCC: HTB-81
DUKX B1	1	Chinese hamster ovary cell line. Synonym: 5A HS MYC ATCC: CRL-9010
E14 ES	1	Derivative of CF-1 mouse embryonic cells (ATCC: SCRC-1040)
Ea.hy 926	1	Fusion of primary human umbilical vein endothelial cells (Huvec) and lung carcinoma cell line A549. Edgell C.S. <i>et al.</i> 1983. PNAS 80:3734-3737
EB 1	2	Cell line producing EBV.
EB 2	2	Cell line producing EBV.
EB 3	2	Cell line producing EBV.

Bezeichnung	Gruppe	Infos
EcoPack2-293	1	Packaging cell line for the production of ecotropic viruses (human embryonic kidney). Clontech
EcoPack-293	1	Packaging cell line for the production of ecotropic viruses (human embryonic kidney). Clontech
EL 4	1	Mouse T lymphoma cell line. ATCC: TIB-39. ECACC: 85023105
elona	1	Syrian hamster tumor cell line.
EPC	1	Carp epithel cell line. ECACC: 93120820
EpH4	1	Mouse mammary gland epithelial cell line, spontaneously immortalized.
ES-D3	1	Mouse pluripotent embryonic stem cell line. Synonym: D3 ATCC: CRL-11632
ESK-4	1	Pig embryonic kidney cell line. ATCC: CL-184
F9	1	Mouse embryonic carcinoma (testicular teratoma) cell line. ATCC: CRL-1720. ECACC: 85061803
FAO	1	Rat hepatocyte cell line. ECACC: 89042701
FDCP-1	1	Mouse bone marrow cell line. DSMZ: ACC 368
FDCP-mix cl.A4	1	Mouse bone marrow cell line. DSMZ: ACC 401
FeLV-3281	2	Cat cell line producing Feline leukemia virus (FeLV), subgroup A ATCC: CRL-9116
FHM	1	Minnow ( <i>Phoxinus laevis</i> ) epithel cell line.
FI5.12	1	Murine lymphoid progenitor cell line. IDUN Pharmaceutical Inc.
FLC-4	1	Human hepatocytes.
FMH202-1	1	Mouse hepatocytes.
FRhK-4	1	Rhesus monkey kidney cell line. ATCC: CRL-1688
FTC-133	1	Human follicular thyroid carcinoma cell line. ECACC: 94060901
G-361	1	Human malignant melanoma cell line. ATCC: CRL-1424. ECACC: 88030401
GaLV	1	Mouse fibroblasts.
GH3	1	Rat pituitary tumor cell line. ECACC: 87012603
GL261	1	Mouse glioblastoma cell line. Herrlinger U. <i>et al.</i> 1997. Cancer Gene Ther. 4:345-352
GM00637	1	Human fibroblast cell line. Coriell Cell Repositories
GM00639	1	Human fibroblast cell line. Coriell Cell Repositories
GM08437	1	Human fibroblast cell line. Coriell Cell Repositories
GM-7373	1	Bovine endothelial aorta cell line. DSMZ: ACC 109
GP+E 86	1	Packaging cell line for the production of ecotropic viurses, derived from NIH 3T3. genetix pharmaceuticals
GP+E AM12	1	Packaging cell line for the production of amphotropic viurses, derived from NIH 3T3. genetix pharmaceuticals
GP2-293	1	293 cells including gag and pol genes of murine leukemia virus.
GP-293 (pVSV-G)	1	Packaging cell line for the production of pantropic viurses, derived from NIH-3T3-cell line. Clontech
H1299	1	Human lung carcinoma cell line. ATCC: CRL-5803
H1792	1	Human lung adenocarcinoma cell line. ATCC: CRL-5895



Bezeichnung	Gruppe	Infos
H4	1	Human nervous tissue glial tumor cell line. ATCC: HTB-148
H460	1	Human lung carcinoma cell line. Synonym: NCI-H460 ATCC: HTB-177
H4-II-E-C3	1	Rat hepatoma cell line. ATCC: CRL-1600
H520	1	Human lung squamous carcinoma cell line. ATCC: HTB-182
H6c7	1	Epithelial cell line.
H9	1	Human cutaneous T lymphocyte cell line, derived from HuT 78. ATCC: HTB-176
H9/HTLV III B	3**	Cell line producing HTLV.
HaCaT	1	Human keratinocytes.
HB-8065	1	Human hepatocytes.
HBL-100	1	Human breast carcinoma cell line. ICLC: HTL00004
HCN-1A	1	Human cortical neuron cell line. ATCC: CRL-10442
HCN-2	1	Human cortical neuron cell line. ATCC: CRL-10742
HCT116	1	Human colorectal carcinoma cell line. ATCC: CCL-247
HEK-293	1	Human kidney cell line. Synonym: 293 ATCC: CRL-1573
HEL	1	Human erythroleukemia cell line. DSMZ: ACC 11
HeLa	1	Human cervical adenocarcinoma cell line. ATCC: CCL-2. ECACC:93021013. DSMZ: ACC 57
HeLa S3	1	Human cervical adenocarcinoma cell line. ATCC: CCL-2.2
Hep 3B	2	Human hepatocellular carcinoma cell line expressing hepatitis B surface antigen HBsAg. ATCC: HB-8064
Hep G2	1	Human hepatoblastoma cell line. ATCC: HB-8065
Hep G2-3.22	1	Human hepatocytes producing non infectuous HBV particles.
HEp-2	1	Human epithelial cell line. HeLa contaminant. ATCC: CCL-23
HePM	1	Human colon fibroblasts. ATCC: CRL-1486
HER911	1	Human embryonic retinoblasts. Helper cell line containing Adenovirus 5 E1A gene. Synonym: 911 Fallaux F.J. <i>et al.</i> 1996. Hum. Gene Ther. 7:215-22.
Hit-T15	1	Hamster cell line including complete SV-40 genome, non-permissive.
HK-2	1	Human kidney cell line.
HL-60	1	Human acute promyelocytic leukemia cell line. ATCC: CCL-240. DSMZ: ACC 3
HM1 ES	1	Mouse embryonic stem cell. Magin T.M. <i>et al.</i> 1992. Nucleic Acids Res. 20:3795-3796 David Melton, University of Edinburgh
HMEC	1	Human mammary epithelial cell line. Clonetics: CC-2551
HS-23	1	Human bone marrow derived stromal cell line. Roecklein B.A. and B. Torok-Storb 1995. Blood 85:997-1005
HS-27A	1	Human bone marrow derived stromal cell line. Roecklein B.A. and B. Torok-Storb 1995. Blood 85:997-1005 ATCC: CRL-2496

Bezeichnung	Gruppe	Infos
HS-5	1	Human bone marrow derived stromal cell line. Roecklein B.A. and B. Torok-Storb 1995. Blood 85:997-1005 ATCC: CRL-11882
Hs578T	1	Human breast carcinoma cell line. ATCC: HTB-126
HSV-Silva 40	2	Cell line producing Herpesvirus saimiri.
HT1080	1	Human fibrosarcome cell line. ATCC: CCL-121
HT-29	1	Human colon adenocarcinoma cell line. ATCC: HTB-38. DSMZ: ACC299
HTC	1	Rat hepatoma cell line. ECACC: 93120108
HuH7	1	Human hepatozyte cell line.
HuT 102	3**	Human cutaneous T-lymphocyte cell line producing HTLV I. ATCC: TIB-162
HuT 78	1	Human cutaneous T-lymphocyte cell line, expressing IL-2 and tumor necrosis factor alpha (TNF-alpha). ATCC: TIB-161
Huvec	1	Human umbilical vein endothelial cell line. Clonetics: CC-2517/2617/0216 or 0124. Dehio C. <i>et al.</i> 1997 J. Cell Sci. 110:2141-2154
HUV-EC-C	1	Human vascular endothelial cell line. ATCC: CRL-1730
IEC-6	1	Rat epithelial cell line. ATCC: CRL-1592
IMR-32	1	Human neuroblastome cell line. ATCC: CCL-127
IMR-90	1	Human fibroblast cell line. ATCC: CCL-186
IPLP	1	Insect cell line.
ISS10	1	Human aortic smooth muscle cell line. Murahashi N. <i>et al.</i> 1992. Biotechnol. Appl. Biochem. 16:152-160
J558	1	Murine myeloma cell line. ATCC: TIB-6
J774	1	Murine macrophage cell line. Muschel R.J. <i>et al.</i> , 1977. J. Immunol. 119:1813-1820
J774A.1	1	Murine reticulum sarcoma cell line. ATCC: TIB-67. ECACC: 91051511
Joyoye	2	Cell line producing EBV.
Jurkat	1	Human T-cell leukemia cell line. ATCC: TIB-152. ECACC: 88042803. DSMZ: ACC 282
K-562	1	Human myelogenous leukemia cell line. ATCC: CCL-243
KB	1	Human carcinoma cell line. ATCC: CCL-17
KB-3-1	1	Human carcinoma cell line.
KB-8-5	1	Human carcinoma cell line.
KB-V1	1	Human carcinoma cell line.
KG-1	1	Human bone marrow cell line (acute myeloidic leukemia)
KHOS/NP	1	Human osteosarcoma cell line, derived from HOS (ATCC CRL-1543) Synonym: R-970-5 ATCC: CRL-1544. ECACC: 84102903
KT-3	2	Human lymphoma cell line (Lennert's lymphoma), virus may be present. Shimizu S. <i>et al.</i> 1988. Blood 71:196-203
L6	1	Rat skeletal muscle myoblast cell line. ATCC: CRL-1458
L-929	1	Murine fibrosacrcoma cell line. Synonym: L-cells ATCC: CCL-1
LAN-1	1	Human neuroblastome cell line. ICLC: HTL 98005

Bezeichnung	Gruppe	Infos
LAN-5	1	Human neuroblastoma cell line. ICLC: HTL 98005
LBRM	1	Murine lymphoma cell line. ATCC: CRL-1778
L-cells	1	Murine fibrosarcoma cell line. Synonym: L-929 ATCC: CCL-1
LinX	1	Human kidney cell line.
LLC-MK2	1	Rhesus monkey kidney cell line. ATCC: CCL-7
LLC-WRC 256	1	Rat carcinoma cell line. ATCC: CCL-38
LMH	1	Chicken hepatoma cell line. ATCC: CRL-2117
LN18	1	Human glioma cell line. ATCC: CRL-2610
LN229	1	Human glioma cell line. ATCC: CRL-2611
LN405	1	Human glioblastoma cell line. DSMZ: ACC 189
LNCaP	1	Human carcinoma cell line. ATCC: CRL-1740
LoVo	1	Human colorectal adenocarcinoma cell line. ATCC: CCL-229. ECACC: 87060101. DSMZ: ACC 350
Ltk-	1	Murine fibroblast cell line. ECACC: 85011432
M1	1	Murine kidney cell line. ATCC: TIB-192
M12.4	1	Murine B-lymphoma cell line. DSMZ: ACC 331
M21	1	Human melanoma cell line. Invitrogen
Malme-3	1	Human skin fibroblast cell line. ATCC: HTB-102
MC3	1	Mouse ATL connective tumor cell line. <a href="http://www.biotech.ist.unige.it">http://www.biotech.ist.unige.it</a>
MC3T3-E1	1	Mouse embryonic calvaria fibroblast cell line. DSMZ: ACC 210
McA-RH7777	1	Rat hepatoma cell line (Morris hepatoma 7777). ATCC: CRL-1601
MCF7	1	Human mammary gland carcinoma cell line. ATCC: HTB-22. ECACC 86012803
MDA-MB-134-VI	1	Human mammary gland ductal carcinoma cell line. ATCC: HTB-23
MDA-MB-231	1	Human mammary gland adenocarcinoma cell line. ATCC: HTB-26
MDA-MB-435S	1	Human mammary gland ductal carcinoma cell line. ATCC: HTB-129
MDA-MB-468	1	Human adenocarcinoma cell line. ICLC: HTL99024
MDBK	1	Madin Darby bovine kidney cell line. ATCC: CCL-22
MDCK	1	Madin Darby canine kidney cell line. ATCC: CCL-34
Me-180	1	Human cervix carcinoma cell line. ATCC: HTB-33
MEL-JUSO	1	Human melanoma cell line. DSMZ: ACC 74
MG-63	1	Human osteosarcoma cell line. ATCC: CRL-1427

Bezeichnung	Gruppe	Infos
MHEC5-T	1	Mouse heart endothelial cell line. DSMZ: ACC 336
MiCL 1	2	Cell line producing murine Sarkoma virus.
MIN6	1	Mouse pancreatic beta cell line. amaxes biosystems
MLA 144	2	Cell line producing Gibbon leukemia virus.
Mm SM+	2	Cell line producing murine mammary tumor virus.
MN9D	1	Mouse mesencephalic neuronal cell line. Choi H.K. <i>et al.</i> 1991. Brain Res. 552:67-76
Mo	3**	Human T-lymphocyte cell line producing HTLV II. Synonym: Mo T ATCC: CRL-8066
Mo T	3**	Human T-lymphocyte cell line producing HTLV II. Synonym: Mo ATCC: CRL-8066
Mo-B	3**	Human T-lymphocyte cell line producing HTLV II and EBV. ATCC: CCL-245
MOLT-3	1	Human acute lymphoblastic leukemia cell line. ATCC: CRL-1552
MOLT-4	1	Human acute lymphoblastic leukemia cell line. ATCC: CRL-1582
MONO-MAC- 6	1	Human acute monocytic leukemia cell line. DSMZ: ACC 124
mpKCCD	1	Murine renal cell line. Robert-Nicoud M. <i>et al.</i> 2001. PNAS 98:2712-2716
MRC-5	1	Human fetal lung fibroblast cell line. ATCC: CCL-171
MS1	1	Mouse pancreatic epithelial cell line.
MT-2	3**	Human T-cell lymphoblast cell line producing HTLV-1. ECACC: 93121518
MT-4	3**	Human T-cell lymphoblast cell line producing HTLV-1.
MVEC	1	Human lung microvascular endothelial cell line. Clonetics: CC-2527
MYC 1-9E10.2	1	Mouse B-lymphocyte cell line. ATCC: CRL-1729
N2A	1	Mouse brain neuroblast. Synonym: Neuro-2a ATCC: CCL-131
N52	1	Human amioctytic cell line.
NAMALWA	2	Human B-cell lymphoma cell line (EBV induced Burkitt's lymphoma). ATCC: CRL-1432. ECACC: 87060801
NC-37	2	Human B-lymphoblastic cell line producing EBV. ATCC: CCL-214. ECACC: 89111414
NCI-H1299	1	Human lung carcinoma cell line. ATCC: CRL-5803
NCI-H441	1	Human lung papillary adenocarcinoma cell line. ATCC: HTB-174
NCI-H460	1	Human lung carcinoma cell line. Synonym: H460 ATCC: HTB-177
NCI-H520	1	Human lung squamous carcinoma cell line. ATCC: HTB-182
Neuro-2a	1	Mouse brain neuroblast. Synonym: N2A ATCC: CCL-131
NFS-5C-1	2	Cell line producing murines leukemia virus.
Nheps	1	Primary hepatocytes. Cambrex CC-2690
NIH-3T3	1	Murine embryonic fibroblast cell line (Swiss mouse embryo). ATCC: CRL-1658. ECACC: 93061524. DSMZ: ACC 59

Bezeichnung	Gruppe	Infos
NRK	1	Rat kidney cell line. ATCC: CRL-6509
NSO	1	Mouse myeloma cell line. ECACC: 85110503
OVCAR-3	1	Human ovary epithelial adenocarcinoma cell line. ATCC: HTB-161
P19	1	Murine teratocarcinoma cell line. ATCC: CRL-1825
P388D1	1	Mouse lymphoma cell line. ATCC: CCL-46
P3HR-1	2	Human B-cells (Burkitt's lymphoma) producing EBV. ATCC: HTB-62
P3U1	1	Mouse myeloma cell line. ATCC: CRL-1597
P3X63Ag8U.1	1	Mouse myeloma lymphoblastic cell line. ATCC: CRL-1597. ECACC: 94120802
P4	1	Drosophila embryonic cell line. Charneau P. <i>et al.</i> 1994. J. Mol. Biol. 241:651-662
P815	1	Mouse mastocytoma cell line. ATCC: TIB-64. DSMZ: ACC 1
PA-1	1	Human teratocarcinoma cell line. ATCC: CRL-1572
PA317	1	Mouse fibroblastic cell line.
PANC-1	1	Human epithelioid pancreatic carcinoma cell line. ATCC: CRL-1469. ECACC: 8709280
PB-3c	1	Mouse bone marrow cell line. JCRB: IFO50267
PC-12	1	Rat adrenal gland cell line (pheochromocytoma). ATCC: CRL-1721
PC-3	1	Human prostata adenocarcinoma cell line. ATCC: CRL-1435
Phoenix-gp	1	Human kidney cell line.
PLC/PRF/5	2	Human hepatoma cell line (Alexander cells) producing HBV surface antigen. ATCC: CRL-8024
PSI 2	1	Mouse fibroblast cell line, derivative of NIH/3T3 cell line (ATCC CRL-1658). Mann R, <i>et al.</i> 1983. Cell 33:153-159
PSI 2 BAG alpha	1	Mouse fibroblast cell line, derivative of PSI 2 cell line. ATCC: CRL-9560
PT67	1	Mouse fibroblast cell line. ATCC: CRL-12284
PtK2 (NBL-5)	1	Potoroo ( <i>Potorous tridactylus</i> ) kidney cell line. ATCC: CCL-56
QIMR-WILL	2	Human myeloblastic leukaemia lymphoblast cell line producing EBV. ECACC: 86030601
R-970-5	1	Human osteosarcoma cell line, derived from HOS (ATCC CRL-1543) Synonym: KHOS/NP ATCC: CRL-1544. ECACC: 84102903
Raji	1	Human B-lymphocyte cell line (Burkitt's lymphoma). Does not produce infectious virus particles. ATCC: CCL-86
Ramos (RA 1)	1	Human B-lymphocyte cell line (Burkitt's lymphoma). ATCC: CRL-1596
RASMC	1	Rat aortic smooth muscle fibroblast-like cell line. <a href="http://www.biotech.ist.unige.it">http://www.biotech.ist.unige.it</a>
Rat2	1	Rat fibroblast cell line. ATCC: CRL-1764
RAW 264.7	2	Rat ascites macrophage cell line. Secretes replicative mouse leukemia viruses. ATCC: TIB-71
RAW 309 Cr.1	1	Mouse monocyte/macrophage cell line. ATCC: TIB-69

Bezeichnung	Gruppe	Infos
RBL-1	1	Rat basophilic leukemia cell line. ATCC: CRL-1378. DSMZ: ACC 147
RD	1	Human muscle cell line (rhabdomyosarcoma). ATCC: CCL-136
RIN-m5F	1	Rat islet of Langerhans beta cell (insuloma). ATCC: CRL-11605
RK13	1	Rabbit epithelial kidney cell line. ATCC: CCL-37
RPE	1	Retinal pigment epithelial (RPE) cell line derived from primary cultures of RPE cells. Clontech
RPE-J	1	Rat retinal pigmented epithelial cell line ATCC: CRL-2240
RTG-2	1	Rainbow trout ( <i>Oncorhynchus mykiss</i> ) mixed (testis, ovary) cell line. ATCC: CCL-55
S2	1	see Schneider's Drosophila Line 2
SAEC	1	Human small airway epithelial cell line. Clonetics: CC-2547
Saos-2	1	Human osteosarcoma cell line. ATCC: HTB-85
ScGT1	2	Mouse neuroblastic cell line infected with Scrapie.
Schneider's Drosophila Line 2	1	Drosophila embryonic cell line. ATCC: CRL-1963. DSMZ: ACC 130
ScN2a	2	Mouse neuroblastic cell line infected with Scrapie.
Sf21	1	Fall armyworm ( <i>Spodoptera frugiperda</i> ) ovary cell line. ECACC: 05022801
Sf9	1	Fall armyworm ( <i>Spodoptera frugiperda</i> ) ovary cell line. ATCC: CRL-1711
SH-SY5Y	1	Human neuroblastoma cell line. ATCC: CRL-2266. DSMZ: ACC 209
SINCC	2	Mouse neuroblastic cell line producing Scrapie agent.
SK-BR-3	1	Human mammary gland adenocarcinoma cell line. ATCC: HTB-30
SK-HEP-1	1	Human liver adenocarcinoma cell line. DSMZ: ACC 141
SK-MEL-1	1	Human melanoma cell line. ATCC: HTB-67. DSMZ: ACC 303
SK-MEL-28	1	Human melanoma cell line. ATCC: HTB-72
SK-N-AS	1	Human neuroblastoma cell line. ATCC: CRL-2137. ECACC: 94092302
SK-N-MC	1	Human neuroepithelioma cell line. ATCC: HTB-10. DSMZ: ACC 203
SK-N-SH	1	Human neuroblastoma cell line. ATCC: HTB-11
SK-OV-3	1	Human ovary adenocarcinoma cell line. ATCC: HTB-77
SKW 6.4	2	Human B-lymphoma cell line. ATCC: TIB-215
SP2/0-Ag14.10	1	Mouse myeloma cell line. ATCC: CRL-1581
ST	1	Pig testicula cell line. ATCC: CRL-1746
SW 156	1	Human kidney cell line (hypernephroma). ATCC: CRL-2175
SW-13	1	Human adrenal cortex adenocarcinoma cell line. ATCC: CCL-105
SW480	1	Human colorectal adenocarcinoma cell line. ATCC: CCL-228
SW620	1	Human colorectal adenocarcinoma cell line. ATCC: CCL-227

Bezeichnung	Gruppe	Infos
SW756	1	Human cervix squamous cell carcinoma cell line. ATCC: CRL-10302
T/G HA-VSMC	1	Human smooth muscle aorta cell line. ATCC: CRL-1999
T-24	1	Human urinary bladder carcinoma cell line. ATCC: HTB-4. DSMZ: ACC 376
T-47D	1	Human breast ductal carcinoma cell line. ATCC: HTB-133
T84	1	Human colon carcinoma cell line. ATCC: CCL-248. ECACC: 88021101
T98G	1	Human glioblastoma multiforme cell line. ATCC: CRL-1690
TAC-2	1	Murine mammary epithelial cell line. Soriano J.V. <i>et al.</i> 1995. J. Cell. Sci. 108:413-430
TF-1	1	Human bone marrow erythroblast cell line (erythroleukemia). ATCC: CRL-2003
THP-1	1	Human acute monocytic leukemia cell line. ATCC: TIB-202
U1/HIV-1	3**	Subclone of U-937 promonocytic cells chronically infected with HIV-1. "AIDS Research and Reference Reagent Program" (U.S. Department of Health and Human Services, NIH)
U-118 MG	1	Human glioblastoma (astrocytoma) cell line. ATCC: HTB-15
U-2 OS	1	Human osteosarcoma cell line. ATCC: HTB-96
U-251	1	Human glioblastoma cell line.
U373 MG	1	Human glioblastoma (astrocytoma) cell line. ECACC: 89081403
U-87 MG	1	Human glioblastoma (astrocytoma) cell line ATCC: HTB-14. ECACC: 89081402
U-937	1	Human histiocytic lymphoma cell line. ATCC: CRL-1593.2
UMR-106	1	Rat osteosarcoma cell line. ATCC: CRL-1661
UT-7	1	Human bone marrow acute myeloid leukemia cell line. DSMZ: ACC 137
V79-4	1	Hamster lung cell line. ATCC: CCL-93
Vero	1	African green monkey kidney cell line. ATCC: CCL-81. ECACC: 84113001. DSMZ: ACC 33 (Vero-B4)
Vero C1008	1	African green monkey kidney cell line. ATCC: CRL-1586
WEHI-3	1	Mouse leukemia cell line. ATCC: TIB-68. ECACC: 86013003. DSMZ: ACC 26
WI-38	1	Human lung fibroblast cell line. ATCC: CCL-75
WiDr	1	Human colorectal adenocarcinoma cell line. ATCC: CCL-218
WIL2-S	2	Human splenic lymphoblast cell line (hereditary spherocytosis). Integrated genome of Epstein Barr Virus. ATCC: CRL-8885
WR 19 M1	2	Cell line producing murine leukemia virus.
WR 19C	2	Cell line producing murine leukemia virus.
WS780	1	Human fibroblast cell line (Werner Syndrome). Synonym: AG11395. Coriell Cell Repositories
Y79	1	Human retinoblast cell line. ATCC: HTB-18
YAC-1	1	Murine lymphoma cell line. ATCC: TIB-160