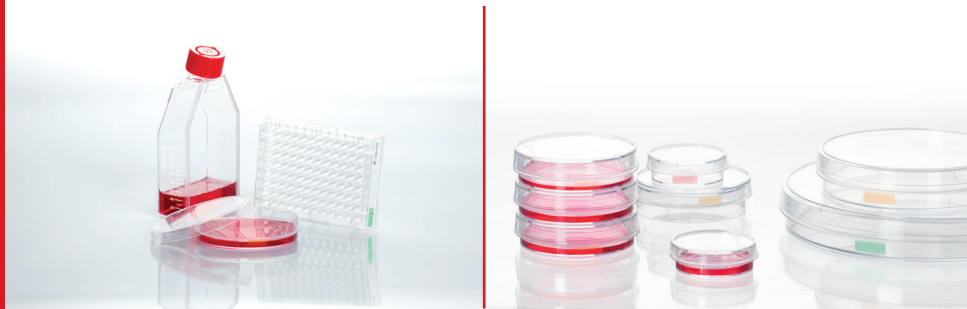
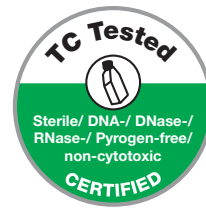
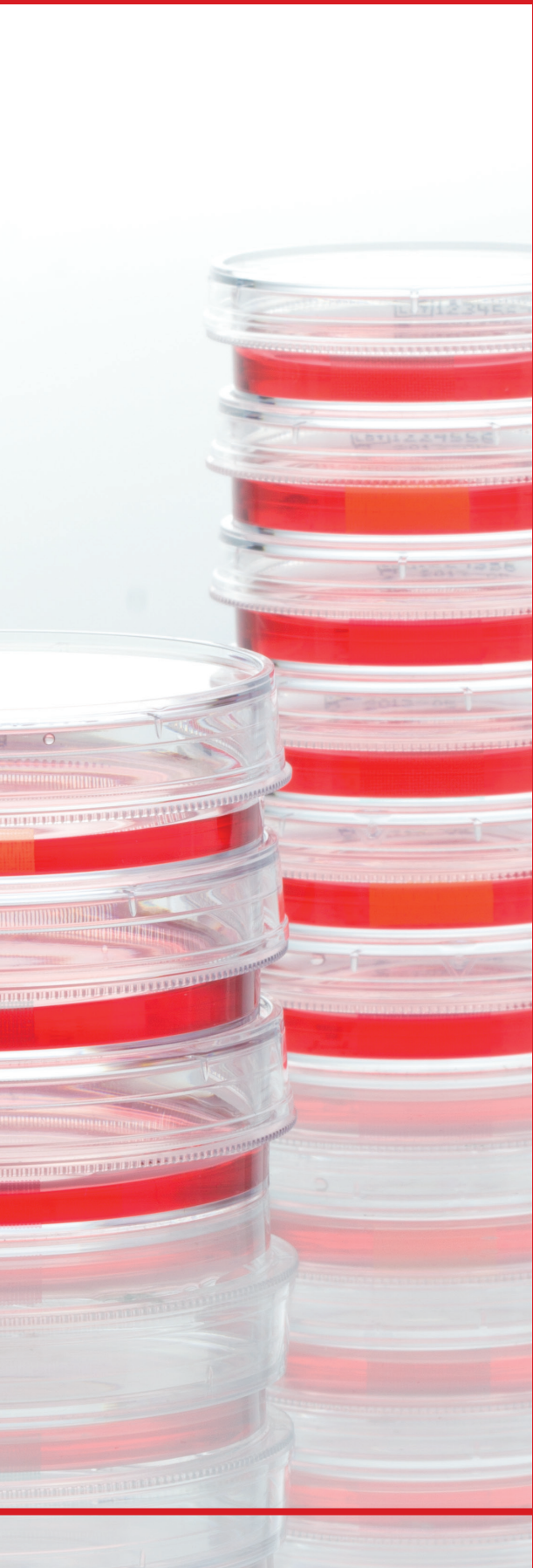


Growth Surface References

Which options do I have for the cultivation of my cells?



Come Grow with us



SARSTEDT

Are you planning to add a new cell line to your cell culture?

Or cell growth could be optimized?

No matter how different your cells are – their demands on the growth surface are just as individual. Our range of TC flasks, dishes and plates is therefore available with three different growth surfaces that come with a colour code for easy identification. For easy selection of the appropriate growth surface, the following pages provide an overview of cells that have already been successfully cultivated on our surfaces.

This Cell Library is intended to support you in selecting the optimal growth surface for your cells. In view of the multitude of factors that have an impact on cell cultivation, we recommend to always test the products under your specific conditions.

Your cell has not been listed yet but you have already tested our growth surfaces?
We are always interested in extending our Cell Library.
Share your experience with us!

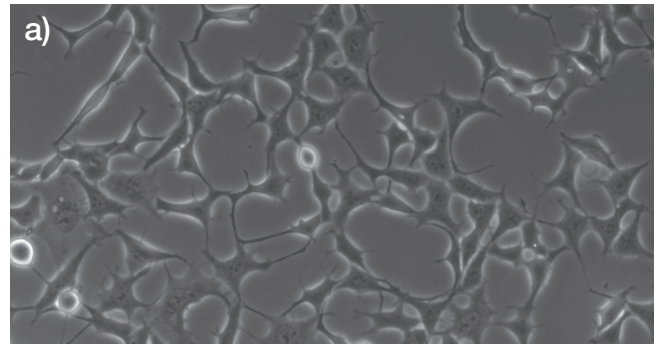


A basic requirement for the successful cultivation of cells *in-vitro* is to simulate the *in-vivo* environment of the relevant cell type as accurately as possible. The surface condition of the culture vessel is particularly important here, because many cell types can only survive, proliferate and differentiate following successful adhesion. In order to meet the requirements for as many different cell types as possible, Sarstedt offers flasks, dishes and plates with three different growth surfaces. The products are labelled as follows according to the Sarstedt colour coding system in order to allow for clear identification of the vessels, even after removal from the packaging:

Sarstedt standard surface for adherent cells



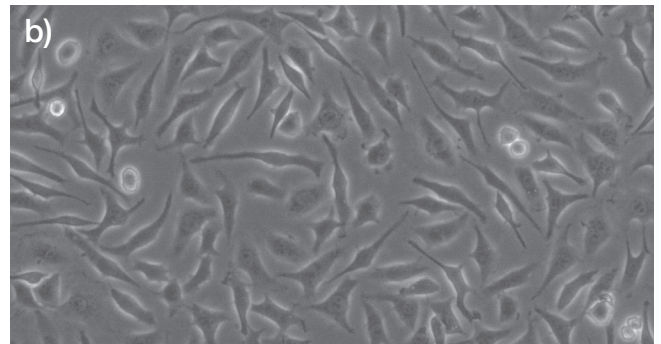
Hydrophilic groups are introduced into the surface via a special treatment of the polystyrene surface. This allows for the formation of cell surface proteins and therefore the adhesion of the cells to the plastic surface. The hydrophilic standard growth surface, which is coded red, therefore provides an optimum culture substrate for many adherent cells.



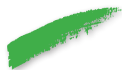
Sarstedt Cell⁺ surface for sophisticated adherent cells



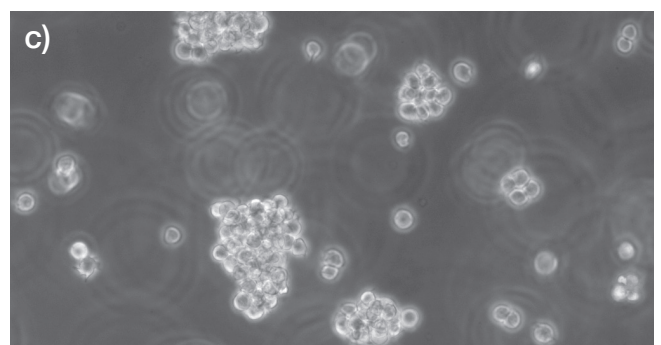
Primary cells, sensitive cell culture lines and cells which are cultivated under serum-reduced/serum-free conditions have particularly high requirements for the surface of the cell culture vessel. The yellow-coded Cell⁺ growth surface was developed specifically for these cells. Additional polar groups are introduced into the hydrophilic surface via special treatment of the plastic surface. This leads to improved imitation of the *in vivo* environment and therefore to the adhesion of sophisticated cells. Due to its properties, the Cell⁺ surface can make the use of coated culture vessels redundant in many cases.



Sarstedt suspension culture surfaces



Culture vessels with the green, hydrophobic growth surface are ideally suited for suspension cells (usually cells of lymphoid origin, hybridoma cells etc.) which are not adherently cultivated in solution. The hydrophobic surface minimises cell losses during sub-cultivation due to unwanted microadhesion.



100 μm

The cultivation of various cell types on Sarstedt growth surfaces clearly shows the vitality of the various cell types. a) HEK293 cells cultivated on the standard TC surface for 48 h. b) CHO cells cultivated on the Cell⁺ surface under serum-reduced conditions (1%) for 24 h. c) Jurkat cells cultivated on the suspension surface for 72 h. (c). The measuring bar corresponds to 100 μm .*

Cells cultivated on our three different growth surfaces

Name	Description	Growth Surface		
		Standard	Cell+	Suspension
143 B	Human bone osteosarcoma cell line			
164T2	Murine T-cell lymphoma cell line			
4T1	Murine mammary gland cell line			
A498	Human kidney carcinoma cell line			
A549	Human non-small cell lung cancer cell line			
ABSa15	Seabream vertebrae cell line (S. aurata)			
AsPC	Human pancreas adenocarcinoma cell line			
AsPC-1	Human pancreatic adenocarcinoma cell line			
Astrocytes	Primary rat astrocytes			
Astrocytes	Primary murine astrocytes			
B cell	B cell lymphoma cell line			
B16F10	Murine melanoma cells			
Balb3T3	Murine fibroblast cell line			
BCE	Bovine adrenal cortical capillary endothelial cells			
BEAS-2B	Human bronchial epithelium cell line			
BeWo	Placental choriocarcinoma cell			
BeWoMDR	Placental choriocarcinoma cell - virally transduced			
BGE	Snail cell line			
Big Blue Mouse Cells	Big Blue mouse embryonic cell line			
BT-474	Human ductal carcinoma cell line			
BT549	Human breast cancer carcinoma cell line			
BxPC-3	Human Pancreas adenocarcinoma cell line			
C6	Rat glioma cell line			
CaCO2	Human epithelial colon adenocarcinoma cell line			
CaCO3	Human epithelial colon adenocarcinoma cell line			
Caov-3	Human ovary adenocarcinoma cell line			
Capan-1	Human pancreas adenocarcinoma cell line (liver metastasis)			
Capan-2	Human pancreas adenocarcinoma cell line			
CCRF-CEM	Human acute lymphoblastic T-leukemia cell line			
CHME5	Human microglia cell line			
CHO	Chinese hamster ovarian cell line			
COLO 205	Human colorectal adenocarcinoma cell line			
COS-7	African green monkey kidney cell line (SV40 transformed)			
COS-8	African green monkey kidney cell line (SV40 transformed)			
CRNK-16	Rat natural killer cell line			
CV-1	African green monkey kidney cell line			
DAOY	Human cerebellar medulloblastoma cell line			
Dendritic cells	Derived from monocytes			
DM-3	Mesothelioma cell line			
Dnmt1 KO/HCT116	Human colon cancer			
Dnmt3b KO/HCT116	Human colon cancer			
DU145	Human prostate carcinoma cell line			
EA.hy926	Human somatic cell hybrid			
Embryonic Bodies	Human embryonic bodies			
EOMA	Murine endothelial cell line (hemangioendothelioma)			
FaDu	Human squamous cell carcinoma cell line (pharynx, epithelial)			

Cells cultivated on our three different growth surfaces

Name	Description	Growth Surface		
		Standard	Cell+	Suspension
Fibroblasts	Human foreskin fibroblasts			
Fibroblasts	Murine fibroblasts			
Fibroblasts	Murine pancreatic fibroblasts			
FM3A	Murine mammary carcinoma cell line			
Ge	Human melanoma cell line			
Glioma Cells	Primary human glioma cells			
Glioma Spheroids	Human glioma spheroid culture			
H292	Non-small cell lung cancer cell line (mucoepidermoid pulmonary carcinoma)			
H460	Non-small cell lung cancer cell line (large-cell)			
H520	Non-small cell lung cancer cell line (squamous cell carcinoma)			
H596	Non-small cell lung cancer cell line (squamous cell carcinoma)			
H661	Non-small cell lung cancer cell line (large-cell)			
H69	Cholangiocytes			
HaCaT	Human keratinocyte cell line			
HCT-116	Human colorectal carcinoma cell line			
HCT-15	Human colorectal carcinoma cell line			
HCT-8	Human colorectal carcinoma cell line			
HDF	Human dermal fibroblasts			
HEC-1-B	Human adenocarcinoma cell line (uterus, epithelial)			
HEK	Human embryonic kidney cell line			
HEK293	Human embryonic kidney cell line			
HEK-293T	Human embryonic kidney cell line - Large T-Antigen			
HeLa	Human cervix carcinoma cell line			
Hep 3B	Human hepatocellular carcinoma cell line			
Hep G2	Human hepatocellular carcinoma cell line			
HLF-A	Human lung fibroblasts			
HLF-F	Human lung fibroblasts			
HmgB1	Murine fibroblast			
HmgB1 KO C1	Murine fibroblast			
HMVEC	Human microvascular endothelial cells			
HT1080	Human connective tissue fibrosarcoma cell line			
HT29	Human colorectal carcinoma cell line			
HTB-9	Human urinary bladder carcinoma cell line			
Huh7	Humane hepatocellular carcinoma cell line			
HupT3	Human pancreatic carcinoma			
HupT4	Human pancreatic carcinoma			
HUVEC	Human umbilical vein endothelial cells			
Hybridoma				
IMR90	Human fibroblast			
IS-AD-MSC	Mesenchymal stem cells from human adipose tissue			
Islet Cells	Primary human pancreatic islet cells			
J774	Murine reticulum cell sarcoma (monocyte/macrophage) cell line			
JL-1	Mesothelioma cell line			
Jurkat	Human lymphoma cell line			
Jurkat E6.1	Human lymphoma cell line			
K-562	Human lymphoma cell line			

Cells cultivated on our three different growth surfaces

Name	Description	Growth Surface		
		Standard	Cell+	Suspension
L2	Murine lung fibroblast cell line			
L-929	Murine fibroblast cell line (subcutaneous connective tissue)			
L-930	Murine fibroblast cell line (subcutaneous connective tissue)			
Lewis Lung	Murine lung carcinoma cell line			
LLC-MK2	Rhesus monkey kidney epithelial cell line			
LN215	Human glioma cell line			
LNCap	Human prostate carcinoma cell line			
Ls180	Human colorectal adenocarcinoma cell line			
Luteinized granulosa cells	Human			
M-14-K	Mesothelioma cell line			
MBIII	Murine lymphoma cell line			
MC57	Fibrosarcoma cell line			
MCF-7	Human breast cancer cell line			
MDA-MB-231	Human mammary adenocarcinoma			
MDA-MB-435	Human breast cancer cell line			
MDA-MB-435 2C5	Human breast cancer cell line			
MDA-MB-435 4A4	Human breast cancer cell line			
MDA-MB-453	Human mammary metastatic adenocarcinoma			
MDA-MB-468	Human mammary adenocarcinoma			
MDCK	Canine kidney cell line			
Medullary Thyroid Carcinoma	Primary medullary thyroid carcinoma cells			
MIA-Paca 2	Human pancreatic carcinoma cell line			
MLE-12	Murine lung epithelial cell line (SV40 transformed)			
MLS-9	Rat microglia cell line			
mMHS	Murine macrophage cell line			
MMT 060562	Murine mammary gland cell line			
Monocyte-derived macrophages				
MSC	Mesenchymal stem cell-like cultures from human umbilical cord			
Myoblasts				
N87	Human gastric carcinoma cell line			
Neurosphere culture				
NIH3T3	Murine embryonic fibroblast cell line			
NUGC 4	Human gastric carcinoma cell line			
OST	Human osteosarcoma cell line			
OVCAR-3	Human ovary adenocarcinoma cell line			
OVCAR-8	Human ovary adenocarcinoma cell line			
P815-1-1	Murine mastocytoma cell line			
PaCa28	Human pancreatic carcinoma cell line			
PA-Tu-8988t	Human pancreas adenocarcinoma cell line			
PC-12	Rat adrenal gland cell line			
PC3	Human prostate adenocarcinoma cell line			
Pituitary Cells	Primary rat pituitary cells (single cells & aggregates)			
pmi28	Murine primary myoblast cells			
Primary cortical neurons				
Raji	Human B lymphocytes cell line			
RAW264.7	Murine macrophage cell line			

Cells cultivated on our three different growth surfaces

Name	Description	Growth Surface		
		Standard	Cell+	Suspension
RGMI186	Rat non-cancer gastric epithelial cell line			
RIN-m5f	Rat pancreas cell line			
RLE-6TN	Rat lung epithelial cell line			
RPM18226	Myeloma cell line			
RT112	Human bladder carcinoma cell line			
S11	Murine T-cell lymphoma cell line			
S2	Schneider's Drosophila cell line (embryo epithelial)			
SCC-25	Human squamous cell carcinoma cell line			
SF2	Rat dental epithelial cells			
SF9	Fall armyworm ovary cell line			
SH-SY5Y	Human neuroblastoma cell line			
SK-BR-3	Human breast cancer cell line			
SK-Hep-1	Human adenocarcinoma cell line			
SK-MES	Non-small cell lung cancer cell line (squamous cell carcinoma)			
SK-OV-3	Human ovary adenocarcinoma cell line			
SL/SI4	Murine mast cell cell line			
SN12C	Human renal cell carcinoma cell line			
SNB-19	Human glioblastoma cell line			
SOSN2	Rat osteosarcoma cell line			
SP2/O	Mouse myeloma cell line			
STAV-AB	Mesothelioma cell line			
STAV-FCS	Mesothelioma cell line			
SW1116	Human colorectal adenocarcinoma cell line			
SW620	Human colorectal adenocarcinoma (lymph node metastasis) cell line			
SW-900	Non-small cell lung cancer cell line (squamous cell carcinoma)			
T24	Human urinary bladder carcinoma cell line			
THP-1	Human monocyte cell line			
TIF-IA tet off HeLaR4	Human cervix carcinoma			
TOV21	Human ovary adenocarcinoma cell line			
TZM	HeLa cell derivative			
U251	Human glioma cell line			
U87 MG	Human glioblastoma cell line			
U937	Human lymphoma cell line			
UACC257	Human melanoma cell line			
UM-UC-3	Human urinary bladder carcinoma cell line			
Vero (1972) P135	African green monkey kidney cell line			
VSa13	Seabream branchial arch cell line (S. aurata)			
VSa16	Seabream branchial arch cell line (S. aurata)			
VSMC	Rat vascular smooth muscle cell line			
WI38	Human fibroblast			
WiDr	Human colorectal adenocarcinoma cell line			
XPA1	Human pancreatic cancer cell line			
YAC-1	Molony virus-induced lymphoma cell line, murine			
ZL-34	Mesothelioma cell line			

...for cells cultivated on the standard adherent growth surface (red)

Name	Description	Literature/Source
143 B	Human bone osteosarcoma cell line	Customer information/Sarstedt in-house test
4T1	Murine mammary gland cell line	Customer information/Sarstedt in-house test
A498	Human kidney carcinoma cell line	Customer information/Sarstedt in-house test
A549	Human non-small cell lung cancer cell line	Cytarska, J. et al., Acta Poloniae Pharmaceutica ñ Drug Research, Vol. 70 No. 3 pp. 481ñ487, 2013
A549	Human non-small cell lung cancer cell line	Karimi-Busheri, F et al., Multidisciplinary Respiratory Medicine 2013, 8:65
ABSa15	Seabream vertebrae cell line (S. aurata)	Marques, C. et al., Cytotechnology (2007) 55:9-13
AsPC-1	Human pancreatic adenocarcinoma cell line	Customer information/Sarstedt in-house test
Astrocytes	Primary rat astrocytes	Ronaldson & Bendayan, J. Neurochem. 2008, 106, 1298-1313
Astrocytes	Primary rat astrocytes	Ronaldson, P. et al., Journal of Neurochemistry, 2004, 89, 788–800
B16F10	Murine melanoma cells	Szczaurska-Nowak, K. et al., Anticancer Research 29: 2361-2370 (2009)
Balb3T3	Murine fibroblast cell line	Cytarska, J. et al., Acta Poloniae Pharmaceutica ñ Drug Research, Vol. 70 No. 3 pp. 481ñ487, 2013
BeWo	Placental choriocarcinoma cell	Mark & Waddell, Endocrinology 2006, 147(11):5147-5152
BeWoMDR	Placental choriocarcinoma cell - virally transduced	Mark & Waddell, Endocrinology 2006, 147(11):5147-5152
BGE	Snail cell line	Customer information/Sarstedt in-house test
Big Blue Mouse Cells	Big Blue mouse embryonic cell line	Bielas & Heddle, PNAS 2000, Vol. 97, No. 21, 11391-11396
BT-474	Human ductal carcinoma cell line	Customer information/Sarstedt in-house test
BT549	Human breast cancer carcinoma cell line	Moon, B. et al., American Journal of Pathology, Vol. 159, No. 3, Sept. 2001
BxPC-3	Human pancreas adenocarcinoma cell line	Customer information/Sarstedt in-house test
C6	Rat glioma cell line	Isakovic, A. et al., Toxicological Sciences 91(1), 173–183 (2006)
CaCO2	Human epithelial colon adenocarcinoma cell line	Mellor, G. et al., Applied and Environmental Microbiology, Mar. 2009, p. 1796–1799
CaCO3	Human epithelial colon adenocarcinoma cell line	Oikonomou, E. et al., British Journal of Cancer (2007) 97, 73 – 84
Caov-3	Human ovary adenocarcinoma cell line	Customer information/Sarstedt in-house test
Capan-1	Human pancreas adenocarcinoma cell line (liver metastasis)	Customer information/Sarstedt in-house test
Capan-2	Human pancreas adenocarcinoma cell line	Customer information/Sarstedt in-house test
CHO	Chinese hamster ovarian cell line	Yamamoto, K. et al., Biochem. J. (2012) 445, 135–144
CHO	Chinese hamster ovarian cell line	Ehrlich, J. et al., Cardiovascular Research 67 (2005) 520 – 528
COLO 205	Human colorectal adenocarcinoma cell line	Customer information/Sarstedt in-house test
COS-7	African green monkey kidney cell line (SV40 transformed)	Ehrlich, J. et al., Cardiovascular Research 67 (2005) 520 – 528
COS-8	African green monkey kidney cell line (SV40 transformed)	Schug and Joseph, The Journal of Biological Chemistry VOL. 281, NO. 34, pp. 24431–24440
CV-1	African green monkey kidney cell line	Customer information/Sarstedt in-house test
DAOY	Human cerebellar medulloblastoma cell line	Customer information/Sarstedt in-house test
DM-3	Mesothelioma cell line	Szulkin A, et al., PLoS ONE 2013, Vol. 8 Issue 6, e65903
DU145	Human prostate carcinoma cell line	Customer information/Sarstedt in-house test
EA.hy926	Human somatic cell hybrid	Customer information/Sarstedt in-house test
EOMA	Murine endothelial cell line (hemangioendothelioma)	Customer information/Sarstedt in-house test
FaDu	Human squamous cell carcinoma cell line (pharynx, epithelial)	Customer information/Sarstedt in-house test

...for cells cultivated on the standard adherent growth surface (red)

Name	Description	Literature/Source
Fibroblasts	Human foreskin fibroblasts	Customer information/Sarstedt in-house test
Fibroblasts	Murine fibroblasts	Customer information/Sarstedt in-house test
Fibroblasts	Murine pancreatic fibroblasts	Mueerkoester, S. et al., Cancer Research 64, 1331–1337, February 15, 2004
Ge	Human melanoma cell line	Elsner, L. et al., J Immunol 2007, 179:5523-5533
Glioma Cells	Primary human glioma cells	Koschny, R. et al., Clin Cancer Res 2007;13:3403-3412
H292	Non-small cell lung cancer cell line (Mucoepidermoid pulmonary carcinoma)	Karimi-Busheri, F et al., Multidisciplinary Respiratory Medicine 2013, 8:65
H460	Non-small cell lung cancer cell line (large-cell)	Karimi-Busheri, F et al., Multidisciplinary Respiratory Medicine 2013, 8:65
H520	Non-small cell lung cancer cell line (squamous cell carcinoma)	Karimi-Busheri, F et al., Multidisciplinary Respiratory Medicine 2013, 8:65
H596	Non-small cell lung cancer cell line (squamous cell carcinoma)	Karimi-Busheri, F et al., Multidisciplinary Respiratory Medicine 2013, 8:65
H661	Non-small cell lung cancer cell line (large-cell)	Karimi-Busheri, F et al., Multidisciplinary Respiratory Medicine 2013, 8:65
H69	Cholangiocytes	Customer information/Sarstedt in-house test
HaCaT	Human keratinocyte cell line	Customer information/Sarstedt in-house test
HCT-116	Human colorectal carcinoma cell line	Customer information/Sarstedt in-house test
HCT-15	Human colorectal carcinoma cell line	Customer information/Sarstedt in-house test
HCT-8	Human colorectal carcinoma cell line	Customer information/Sarstedt in-house test
HDF	Human dermal fibroblasts	Customer information/Sarstedt in-house test
HEC-1-B	Human adenocarcinoma cell line (uterus, epithelial)	Customer information/Sarstedt in-house test
HEK293	Human embryonic kidney cell line	Qasim, M. et al., Proteome Science 2011, 9:57
HEK293	Human embryonic kidney cell line	Yamamoto, K. et al., Biochem. J. (2012) 445, 135–144
HEK-293T	Human embryonic kidney cell line - Large T-Antigen	Javadi, M. et al., J. Biol. Chem., published online May 21, 2013
HEK-293T	Human embryonic kidney cell line - Large T-Antigen	Shcharbin, D. et al., Pharmaceutics 2011, 3, 458-473
HeLa	Human cervix carcinoma cell line	Fischer, R. et al., The Journal of Biological Chemistry, Vol.279, No. 13, Issue of March 26.pp. 12625-12635, 2004
HeLa	Human cervix carcinoma cell line	Leduc, M. et al., New Journal of Physics 11 (2009) 115021
Hep 3B	Human hepatocellular carcinoma cell line	Customer information/Sarstedt in-house test
Hep G2	Human hepatocellular carcinoma cell line	Harnack, K. et al., Nutrition & Metabolism 2009, 6:8
HLF-A	Human lung fibroblasts	Customer information/Sarstedt in-house test
HLF-F	Human lung fibroblasts	Customer information/Sarstedt in-house test
HMVEC	Human microvascular endothelial cells	Gonzales, M. et al., Molecular Biology of the Cell Vol. 12, 85-100, 2001
HT1080	Human connective tissue fibrosarcoma cell line	Customer information/Sarstedt in-house test
HT29	Human colorectal carcinoma cell line	Qasim, M. et al., Proteome Science 2011, 9:57
HT29	Human colorectal carcinoma cell line	Oikonomou, E. et al., British Journal of Cancer (2007) 97, 73 – 84
HT29	Human colorectal carcinoma cell line	Mellor, G. et al., Applied and Environmental Microbiology, Mar. 2009, p. 1796–1799
HTB-9	Human urinary bladder carcinoma cell line	Customer information/Sarstedt in-house test
Huh7	Humane hepatocellular carcinoma cell line	Gozdek, A. et al., Antimicrobial Agents and Chemotherapy, Feb. 2008, p. 393–401
J774	Murine reticulum cell sarcoma (monocyte/macrophage) cell line	Miranda-CasoLuengo, R. et al., Infect. Immun. 2012, 80(12):4106
JL-1	Mesothelioma cell line	Szulkin A, et al., PLoS ONE 2013, Vol. 8 Issue 6, e65903

...for cells cultivated on the standard adherent growth surface (red)

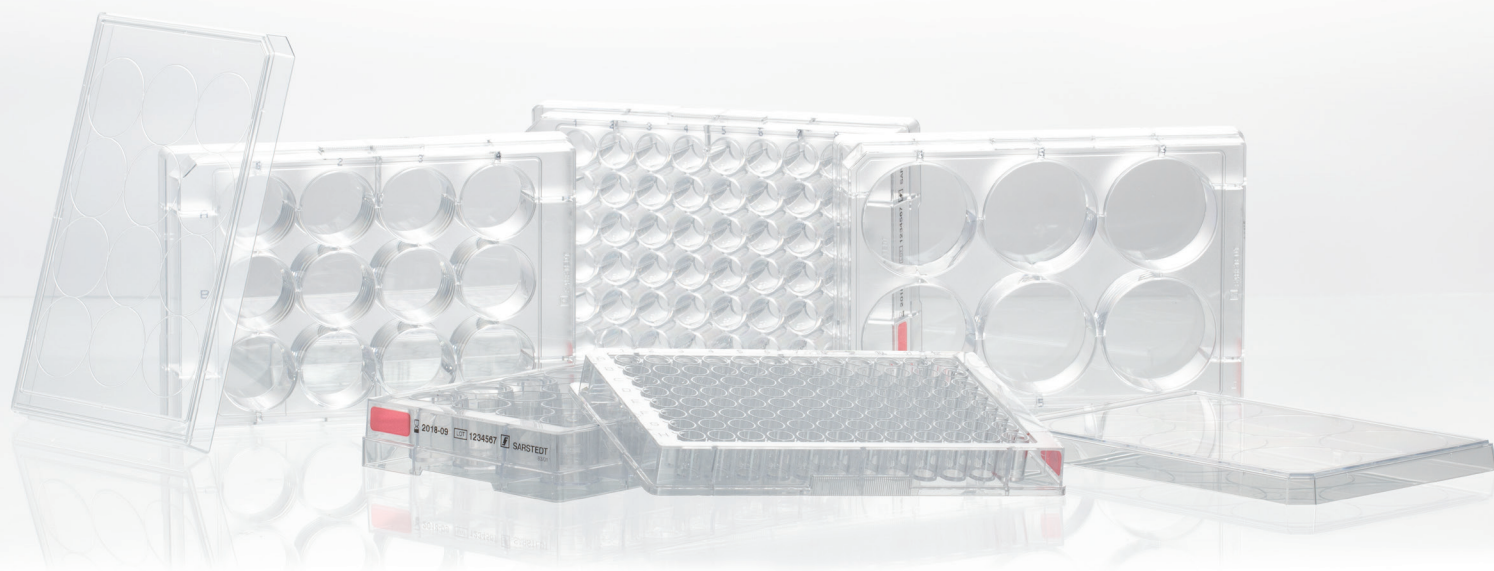
Name	Description	Literature/Source
L2	Murine lung fibroblast cell line	Baig & Fish, Antiviral Therapy 2008 13:409-422
L-929	Murine fibroblast cell line (subcutaneous connective tissue)	Baig & Fish, Antiviral Therapy 2008 13:409-422
L-930	Murine fibroblast cell line (subcutaneous connective tissue)	Isakovic, A. et al., Toxicological Sciences 91(1), 173–183 (2006)
Lewis Lung	Murine lung carcinoma cell line	Customer information/Sarstedt in-house test
LLC-MK2	Rhesus monkey kidney epithelial cell line	Customer information/Sarstedt in-house test
LN215	Human glioma cell line	Koschny, R. et al., Clin Cancer Res 2007;13:3403-3412
LNCap	Human prostate carcinoma cell line	Butterworth, K. et al., Int. J. Cancer: 123, 760–768 (2008)
LNCap	Human prostate carcinoma cell line	Tassidis, H. et al., Int. J. Cancer: 126, 2296–2307 (2010)
Ls180	Human colorectal adenocarcinoma cell line	Customer information/Sarstedt in-house test
Luteinized granulosa cells	Human	Rodewald, M. et al., Human Reproduction, Vol.24, No.5 pp. 1191–1199, 2009
M-14-K	Mesothelioma cell line	Szulkin A, et al., PLoS ONE 2013, Vol. 8 Issue 6, e65903
MC57	Fibrosarcoma cell line	Fischer, R. et al. The Journal of Biological Chemistry, Vol.279, No. 13, Issue of March 26.pp. 12625-12635, 2004
MCF-7	Human breast cancer cell line	Lovic, J. et al. Chemistry & Biology, Vol. 12, 1227–1234, November 2005
MCF-7	Human breast cancer cell line	Cytarska, J. et al., Acta Poloniae Pharmaceutica ñ Drug Research, Vol. 70 No. 3 pp. 481ñ487, 2013
MCF-7	Human breast cancer cell line	Ecimovic, P. et al., British Journal of Anaesthesia 107 (6): 916–23 (2011)
MCF-7	Human breast cancer cell line	Constantini, D. et al., The Journal of Nuclear Medicine, 2008, Vol. 49, No. 9, 1498-1505
MDA-MB-231	Human mammary adenocarcinoma	Ecimovic, P. et al., British Journal of Anaesthesia 107 (6): 916–23 (2011)
MDA-MB-231	Human mammary adenocarcinoma	Constantini, D. et al., The Journal of Nuclear Medicine, 2008, Vol. 49, No. 9, 1498-1505
MDA-MB-232	Human mammary adenocarcinoma	Bordag et al., Metabolomics 2016, 6:1, doi: 10.4172/2153-0769.1000164
MDA-MB-435	Human breast cancer cell line	Furlong, S. et al., Oncology Reports 15: 1385-1390, 2006
MDA-MB-435 2C5	Human breast cancer cell line	Customer information/Sarstedt in-house test
MDA-MB-435 4A4	Human breast cancer cell line	Customer information/Sarstedt in-house test
MDA-MB-453	Human mammary metastatic adenocarcinoma	Customer information/Sarstedt in-house test
MDA-MB-468	Human mammary adenocarcinoma	Customer information/Sarstedt in-house test
MDCK	Canine kidney cell line	Customer information/Sarstedt in-house test
MIA-Paca 2	Human pancreatic carcinoma cell line	Customer information/Sarstedt in-house test
MLE-12	Murine lung epithelial cell line (SV40 transformed)	Customer information/Sarstedt in-house test
MLS-9	Rat microglia cell line	Dallas, S. et al., The Journal of Pharmacology and experimental Therapeutics, Vol. 307, No. 1, 282-290, 2003
mMHS	Murine macrophage cell line	Customer information/Sarstedt in-house test
MMT 060562	Murine mammary gland cell line	Customer information/Sarstedt in-house test
Monocyte-derived macrophages	Human	Weis, N. et al., Molecular Biology of the Cell , 2009, Vol. 20, 1280–1288
MSC	Mesenchymal stem cell-like cultures from human umbilical cord	Majore, I. et al., Cell Communication and Signaling 2009, 7:6
MSC	Human bone marrow derived mesenchymal stem cells	Shcharbin, D. et al., Pharmaceutics 2011, 3, 458-473
N87	Human gastric carcinoma cell line	Customer information/Sarstedt in-house test

...for cells cultivated on the standard adherent growth surface (red)

Name	Description	Literature/Source
NIH3T3	Murine embryonic fibroblast cell line	Lührig, S. et al., Cell Division 2013, 8:3
NUGC 4	Human gastric carcinoma cell line	Customer information/Sarstedt in-house test
OST	Human osteosarcoma cell line	Customer information/Sarstedt in-house test
OVCAR-3	Human ovary adenocarcinoma cell line	Customer information/Sarstedt in-house test
OVCAR-8	Human ovary adenocarcinoma cell line	Customer information/Sarstedt in-house test
PaCa28	Human pancreatic carcinoma cell line	Customer information/Sarstedt in-house test
PC3	Human prostate adenocarcinoma cell line	Cytarska, J. et al., Acta Poloniae Pharmaceutica ñ Drug Research, Vol. 70 No. 3 pp. 481ñ487, 2013
PC3	Human prostate adenocarcinoma cell line	Tassidis, H. et al., Int. J. Cancer: 126, 2296–2307 (2010)
Pituitary Cells	Primary rat pituitary cells (single cells & aggregates)	Hauspie, A. et al., Endocrinology 2003, 144(1):388-399
RAW264.7	Murine macrophage cell line	Customer information/Sarstedt in-house test
RGM#186	Rat non-cancer gastric epithelial cell line	Customer information/Sarstedt in-house test
RLE-6TN	Rat lung epithelial cell line	Customer information/Sarstedt in-house test
RPM18226	Myeloma cell line	Customer information/Sarstedt in-house test
RT112	Human bladder carcinoma cell line	Martinez-Torrecedrada, J. et al., Clin Cancer Res 2005;11:6280-6290
SCC-25	Human squamous cell carcinoma cell line	Mannini, A. et al., British Journal of Nutrition (2009), 102, 958–961
SH-SY5Y	Human neuroblastoma cell line	Boettcher, C. et al., PNAS, 2005, Vol. 102, No. 24, 8495–8500
SK-BR-3	Human breast cancer cell line	Constantini, D. et al., The Journal of Nuclear Medicine, 2008, Vol. 49, No. 9, 1498-1505
SK-Hep-1	Human adenocarcinoma cell line	Customer information/Sarstedt in-house test
SK-MES	Non-small cell lung cancer cell line (squamous cell carcinoma)	Karimi-Busheri, F et al., Multidisciplinary Respiratory Medicine 2013, 8:65
SK-OV-3	Human ovary adenocarcinoma cell line	Customer information/Sarstedt in-house test
SL/SI4	Murine mast cell cell line	Customer information/Sarstedt in-house test
SN12C	Human renal cell carcinoma cell line	Customer information/Sarstedt in-house test
SNB-19	Human glioblastoma cell line	Customer information/Sarstedt in-house test
SOSN2	Rat osteosarcoma cell line	Customer information/Sarstedt in-house test
SP2/O	Mouse myeloma cell line	Customer information/Sarstedt in-house test
STAV-AB	Mesothelioma cell line	Szulkin A, et al., PLoS ONE 2013, Vol. 8 Issue 6, e65903
STAV-FCS	Mesothelioma cell line	Szulkin A, et al., PLoS ONE 2013, Vol. 8 Issue 6, e65903
SW1116	Human colorectal adenocarcinoma cell line	Customer information/Sarstedt in-house test
SW620	Human colorectal adenocarcinoma (lymph node metastasis) cell line	Customer information/Sarstedt in-house test
SW-900	Non-small cell lung cancer cell line (squamous cell carcinoma)	Karimi-Busheri, F. et al., Multidisciplinary Respiratory Medicine 2013, 8:65
T24	Human urinary bladder carcinoma cell line	Customer information/Sarstedt in-house test
THP-1	Human monocyte cell line	Wollersheim, S. et al., Journal of Interferon & Cytokine Research Volume 32, Number 6, 2012
TOV21	Human ovary adenocarcinoma cell line	Customer information/Sarstedt in-house test
TZM	HeLa cell derivative	Customer information/Sarstedt in-house test
U251	Human glioma cell line	Kaludjerovic, G. et al., Int. J. Cancer: 116, 479–486 (2005)
U251	Human glioma cell line	Isakovic, A. et al., Toxicological Sciences 91(1), 173–183 (2006)
U87 MG	Human glioblastoma cell line	Customer information/Sarstedt in-house test

...for cells cultivated on the standard adherent growth surface (red)

Name	Description	Literature/Source
UACC257	Human melanoma cell line	Customer information/Sarstedt in-house test
UM-UC-3	Human urinary bladder carcinoma cell line	Customer information/Sarstedt in-house test
Vero (1972) P135	African green monkey kidney cell line	Customer information/Sarstedt in-house test
VSa13	Seabream branchial arch cell line (<i>S. aurata</i>)	Marques, C. et al., Cytotechnology (2007) 55:9-13
VSa16	Seabream branchial arch cell line (<i>S. aurata</i>)	Marques, C. et al., Cytotechnology (2007) 55:9-13
VSMC	Rat vascular smooth muscle cell line	Customer information/Sarstedt in-house test
WiDr	Human colorectal adenocarcinoma cell line	Customer information/Sarstedt in-house test
XPA1	Human pancreatic cancer cell line	Customer information/Sarstedt in-house test
ZL-34	Mesothelioma cell line	Szulkin A, et al., PLoS ONE 2013, Vol. 8 Issue 6, e65903



...for cells cultivated on the Cell+ growth surface (yellow)



Name	Description	Literature/Source
AsPC	Human pancreas adenocarcinoma cell line	Customer information/Sarstedt in-house test
ADSC	Adipose-derived human stem cells	Rauch C. et al., Journal of Advanced Biotechnology and Bioengineering, 2014, 2, 1-11
Astrocytes	Primary murine astrocytes	Customer information/Sarstedt in-house test
BCE	Bovine adrenal cortical capillary endothelial cells	Svensson, A. et al., Anticancer Research 25: 207-212 (2005)
BEAS-2B	Human bronchial epithelium cell line	Customer information/Sarstedt in-house test
CHME5	Human microglia cell line	Customer information/Sarstedt in-house test
CHO	Chinese hamster ovary	Customer information/Sarstedt in-house test
Dendritic cells	Derived from monocytes	Customer information/Sarstedt in-house test
Dnmt1 KO/ HCT116	Human colon cancer	Customer information/Sarstedt in-house test
Dnmt3b KO/ HCT116	Human colon cancer	Customer information/Sarstedt in-house test
Embryonic Bodies	Human embryonic bodies	Hansson, M. et al., Diabetes, Vol. 53, pp. 2603-2609, 2004
FM3A	Murine mammary carcinoma cell line	Customer information/Sarstedt in-house test
HCT116	Human colon cancer cell line	Customer information/Sarstedt in-house test
HEK	Human embryonic kidney cell line	Customer information/Sarstedt in-house test
HEK-293	Human embryonic kidney cell line	Customer information/Sarstedt in-house test
HEK-293T	Human embryonic kidney cell line	Customer information/Sarstedt in-house test
HeLa	Human cervix carcinoma	Customer information/Sarstedt in-house test
HmgB1	Murine fibroblast	Customer information/Sarstedt in-house test
HmgB1 KO C1	Murine fibroblast	Customer information/Sarstedt in-house test
HT1080	Human fibrosarcoma	Customer information/Sarstedt in-house test
HupT3	Human pancreatic carcinoma	Customer information/Sarstedt in-house test
HupT4	Human pancreatic carcinoma	Customer information/Sarstedt in-house test
HUVEC	Human umbilical vein endothelial cells	Anderson, H. et al., Toxicology 262 (2009) 57-64
IMR90	Human fibroblast	Customer information/Sarstedt in-house test
IS-AD-MSC	Mesenchymal stem cells from human adipose tissue	Dave et al., Indian Journal of Endocrinology and Metabolism, 2012 Mar, 16(Suppl1):S65-S69. doi: 10.4103/2230-8210.94264
J774	Murine reticulum cell sarcoma (monocyte/macrophage) cell line	Customer information/Sarstedt in-house test
L-929	Murine fibroblast cell line (subcutaneous connective tissue)	Customer information/Sarstedt in-house test
LNCap	Human prostate carcinoma cell line	Customer information/Sarstedt in-house test
MBIII	Murine lymphoma cell line	Customer information/Sarstedt in-house test
MDCK	Canine kidney cell line	Customer information/Sarstedt in-house test
Medullary Thyroid Carcinoma	Primary medullary thyroid carcinoma cells	Pfragner, R. et al., Anticancer Research 25: 4225-4230 (2005)
Monocyte- derived macro- phages		Customer information/Sarstedt in-house test
Myoblasts		Customer information/Sarstedt in-house test
NIH3T3	Mouse fibroblast	Customer information/Sarstedt in-house test

...for cells cultivated on the Cell+ growth surface (yellow)

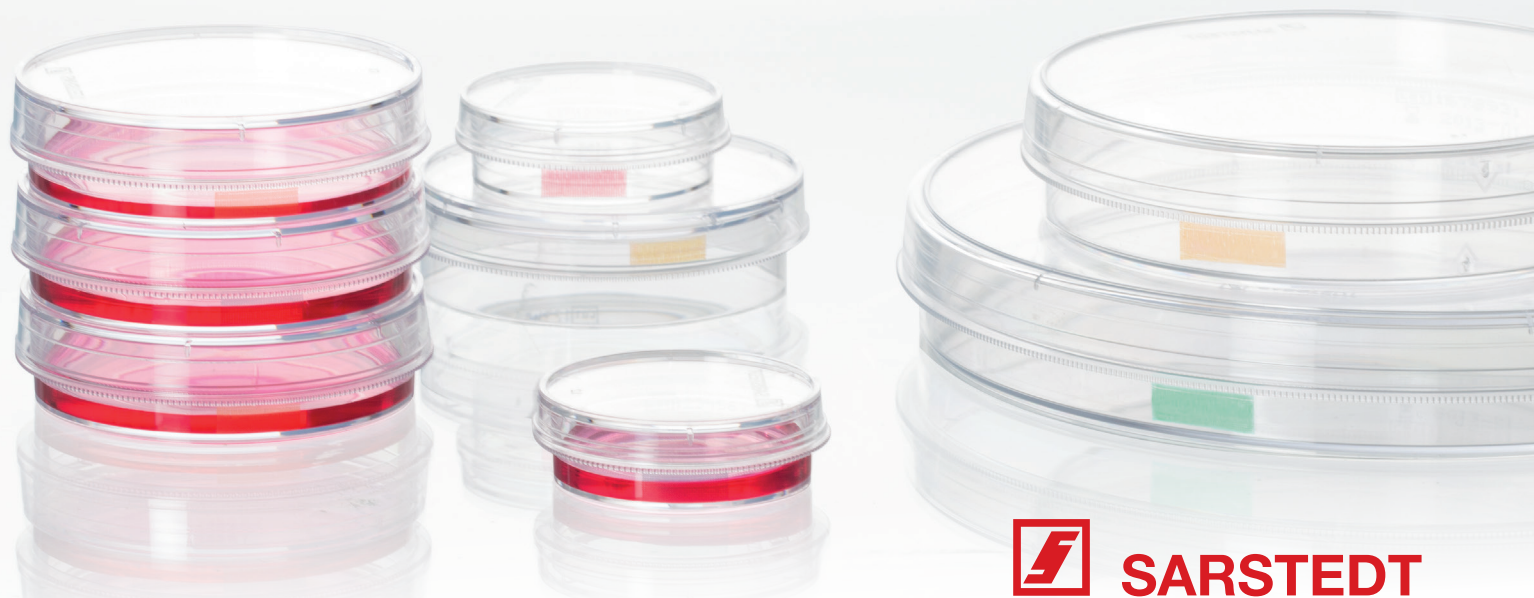


Name	Description	Literature/Source
PA-Tu-8988t	Human pancreas adenocarcinoma cell line	Customer information/Sarstedt in-house test
PC-12	Rat adrenal gland cell line	Customer information/Sarstedt in-house test
PCMO	Human peripheral blood monocytes	Ungefroren H. et al., PLOS ONE, DOI:10.1371/journal.pone.0118097 February 23, 2015
pmi28	Murine primary myoblast cells	Storz, P. et al., FEBS Letters 440 (1998) 41-45
Primary cortical neurons		Customer information/Sarstedt in-house test
RIN-m5f	Rat pancreas cell line	Customer information/Sarstedt in-house test
SH-SY5Y	Human neuroblastoma cell line	Customer information/Sarstedt in-house test
TIF-IA tet off HeLaR4	Human cervix carcinoma	Customer information/Sarstedt in-house test
WI38	Human fibroblast	Customer information/Sarstedt in-house test



...for cells cultivated on the suspension growth surface (green)

Name	Description	Literature/Source
164T2	Murine T-cell lymphoma cell line	Mannini, A. et al., British Journal of Nutrition (2009), 102, 958-961
B cell	B cell lymphoma cell line	Gupta, S. et al., The Journal of Pharmacology and Experimental Therapeutics, Vol. 341, No. 1 341:16-23, 2012
CCRF-CEM	Human acute lymphoblastic T-leukemia cell line	Furlong, S. et al., International Journal of Oncology Vol., 32: 537-544, 2008
Chromaffin cells Spheroids	Primary chromaffin adrenal medulla cells	Vukicevic V. et al., Cell Transplantation, Vol. 21, pp. 2471-2486, 2012
CRNK-16	Rat natural killer cell line	Stehling, S. et al., International Immunology, 2004, Vol. 16, No. 1, pp. 101-110
DU145	Human prostate carcinoma cell line	Rybak, A. et al., PLOS ONE, 2013, Vol. 8, Issue 4, e61716
Glioma Spheroids	Human glioma spheroid culture	Ernst, A. et al., Clin. Cancer Res. 2009;15:6541-6550
hfSDSCs	Human fetus skin-derived stem cells	Ge W. et.al, Scientific Reports, 5:13822, DOI: 10.1038/srep13822
Hybridoma		Customer information/Sarstedt in-house test
Islet Cells	Primary human pancreatic islet cells	Suarez-Pinzon, W. et al, The Journal of Clinical Endocrinology & Metabolism 2005, 90(6):3401-3409
Jurkat	Human lymphoma cell line	Furlong, S. et al., International Journal of Oncology 32: 537-544, 2008
Jurkat E6.1	Human lymphoma cell line	Ruttekolk, I. et al., Mol Pharmacol 79:692-700, 2011
K-562	Human lymphoma cell line	Customer information/Sarstedt in-house test
Neurosphere culture		Dictus et al., Journal of Neuroscience Methods 161 (2007) 250-258
P815-1-1	Murine mastocytoma cell line	Stehling, S. et al., International Immunology, Vol. 16, No. 1, pp. 101-110
Raji	Human B lymphocytes cell line	Customer information/Sarstedt in-house test
S11	Murine T-cell lymphoma cell line	Customer information/Sarstedt in-house test
S2	Schneider's Drosophila cell line (embryo epithelial)	Clemens, J. et al., PNAS, 2000, Vol. 97, No. 12, 6499-6503
SF2	Rat dental epithelial cells	Customer information/Sarstedt in-house test
Sf9	Fall armyworm ovary cell line	Customer information/Sarstedt in-house test
Spheroids ES-R1 and YC5	Mouse embryonic stem cells	Dang, Gerech-Nir, Chen et al.,STEM CELLS 2004;22:275-282,DOI: 10.1634
U937	Human lymphoma cell line	Customer information/Sarstedt in-house test
YAC-1	Molony virus-induced lymphoma cell line, murine	Stehling, S. et al., International Immunology, 2004, Vol. 16, No. 1, pp. 101-110

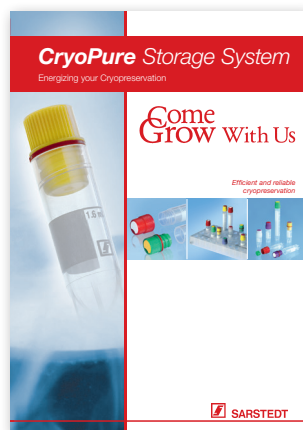


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Brochure 215



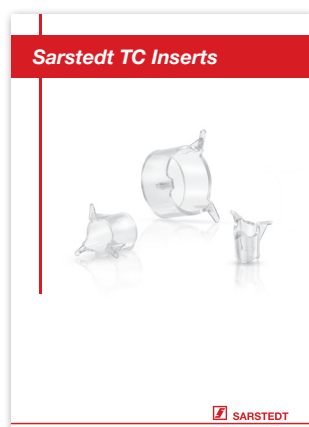
Brochure 417



Brochure 719



Brochure 512



Brochure 745



Brochure 471

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