



STEM CELLS

YOUR RESEARCH - OUR SOLUTION

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GROW
together

 **Fisher
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The extracellular matrix (ECM) is the non-cellular component present within all tissues and organs, and provides not only essential physical scaffolding for the cellular constituents but also initiates crucial biochemical and biomechanical cues that are required for tissue morphogenesis, differentiation and homeostasis (Jarvelainen et al., 2009). When culturing cells in the laboratory, various types of biological coatings that mimic the ECM can be used to support and improve enhanced cell growth *in vitro*. Some of the ECM mimetics are defined for stem and progenitor cell expansion and these are explained in more detail below.

Coating types

Collagen I, found in most tissues and organs, is most plentiful in dermis, tendon, and bone. It is an integral part of the framework that hold cells and tissues together and has been recognised as a useful matrix for improving cell culture. *In vitro* use of collagen can exert effect on the adherence, morphology, growth, migration, and differentiation of a variety of cell types.

Examples of cells: endothelial cells (e.g. HUVEC), hepatocytes, muscle cells, PC12 cells, osteoclasts, or transfected HEK-293 cells

Type IV Collagen is a ubiquitous component in basement membranes and provides the major structural support for this matrix. When the Collagen IV meshwork is assembled, it provides a scaffold for the assembly of other basement membrane components through interactions with laminin, entactin/nidogen, and heparan sulfate proteoglycan.

Examples of cells: epithelial cells, human epidermal stem cells, keratinocytes, mouse ES cells, and HT-1080 cells.

Poly-D-Lysine (PDL) is a synthetic amino acid chain that is positively charged and widely used as a coating to enhance cell adhesion and protein absorption by altering surface charges on the culture substrate. As PDL are synthetic molecules, they do not stimulate biological activity in the cells cultured on them, and they do not introduce impurities carried by natural polymers.

Examples of cells: transfected cells, neuronal cell lines, primary neurons, and glial cells.

Poly-L-Lysine (PLL) is a synthetic amino acid chain that is positively charged and widely used as a coating to enhance cell adhesion and protein absorption by altering surface charges on the culture substrate. As PLL are synthetic molecules, they do not stimulate biological activity in the cells cultured on them, and they do not introduce impurities carried by natural polymers.

Examples of cells: transfected cells, neuronal cell lines, primary neurons and glial cells.

Human Fibronectin (HFN) is a widely distributed glycoprotein that is used as a substrate to promote attachment of cells through its central-binding domain RGD sequence. The principal function of HFN appears to be in cellular migration during wound healing and development, regulation of cell growth and differentiation, and haemostasis/thrombosis.

Examples of cells: smooth muscle cells, endothelial cells, neuroblastoma cells, human myeloma cell lines and lung fibroblasts.

Poly-D-Lysine/Laminin (PDL/LM) and Poly-L-Ornithine/Laminin (PLO/LM) products are suitable for culturing many different types of Peripheral Nervous System (PNS) and Central Nervous System (CNS) networks and are useful for promoting neural cell attachment and differentiation. Laminin/Human Fibronectin (LM/HF) provides an *in vitro* environment that promotes cell attachment and extensive process formation.

Examples of cells: Embryonic rat sympathetic neurons, cerebellar macroneurons, rat astrocytes, and adult human bone marrow stem cells have been successfully cultured on PDL/LM or PLO/LM products.

Matrix types

Thermo Scientific™ Nunclon™ Sphera™ products support the embryoid bodies (EBs) formation of human embryonic stem cell (hESC). This coating inhibits cell attachment to the culture dish by blocking the adsorption of extracellular matrix (ECM) proteins that usually mediate cell adhesion, thereby promoting cell-cell aggregation *in vitro*. It allows for stem cells to grow in suspension with virtually no attachment.

Matrigel™ Matrix provides a physiologically relevant surface for a range of applications and cell types, including human embryonic and induced pluripotent stem cells, mammary acinar formation and endothelial tube formation. BioCoat Matrigel is also certified LDEV-free.

Examples of cells: Sertoli cells, myogenic cells, mammary epithelial cells, rat brain microvessels, and hepatocytes.

Feeder cell and extracellular matrix-free cultivation of human pluripotent stem cells using **Thermo Scientific™ Nunclon™ Nunclon™ Vita™** surface and rho-kinase Inhibition. This is another way of culturing stem cells without the usage of feeder cells to keep your stem cells from being contaminated.

Corning™ PureCoat™ ECM mimetic cultureware is animal-free, synthetic, scalable Fibronectin- or collagen-I-based peptide coated cultureware, enabling serum-free, xeno- or animal-free expansion of hMSCs, keratinocytes and other progenitor cell types. ECM mimetic cultureware is room temperature stable, manufactured to cGMP and is cost comparable to biological coating protocols.

Corning™ Ultra-Low Attachment Surface is a hydrophilic, neutrally charged hydrogel coating that is covalently bound to the polystyrene surface of a vessel. The hydrogel inhibits specific and nonspecific immobilisation, which forces cells into a suspended state that enables 3D spheroid formation.

Corning™ Synthemax™ is an animal-free, synthetic, flexible Vitronectin-based peptide substrate for serum or serum-free expansion of hPSCs and other adult stem cell types. Amenable to coating a number of vessel formats, including Corning microcarriers for larger-scale stem cell expansion applications.

What are stem cells?

Stem cells are undifferentiated biological cells that can differentiate into specialised cells and can divide (through mitosis) to produce more stem cells. They are found in multicellular organisms. In mammals, there are two broad types of stem cells: embryonic stem cells, which are isolated from the inner cell mass of blastocysts, and adult stem cells, which are found in various tissues. In adult organisms, stem cells and progenitor cells act as a repair system for the body, replenishing adult tissues.

Breaking news...

Spanish Stem cell "treatment": The world's first stem cell treatment for heart attacks. Stem cells were harvested from a healthy donor, and then implanted into 7 different patients who had suffered from a heart attack. Using stem cells from a healthy donor means that the cells can be prepared and stored ahead of time for use when needed.

Manchester University is pioneering the use of graphene in a completely different way: to neutralise cancer stem cells (CSC) while not harming other cells. By using a modified version of graphene oxide flakes on six kinds of cancer cells - the university discovered that Graphene acts as an anti-cancer agent that selectively targets stem cells. Researchers want to use the graphene oxide as a type of washing solution and after surgery, to pump it into the cancer area to destroy any stem cell survivors and to avoid chance of returning or re-seeding.

Why use specific products to cultivate stem cells?

Growing and manipulating stem cells is as much a work of art as a technical skill. Choosing the right surface for your cells improves the success rate both in quantity and quality. Stem cells are used for cell-based therapeutics, thus reliability is critical; stem cells need to grow without altering their nature. It is vital when working with cells to avoid contamination, perhaps even more so when working with stem cells in order to regulate the differentiation of the cells to the adult cell of choice.

Finding the optimal surface for growing your cells

Cell Type	Complex Attachment	Purified ECM Attachment	Human-derived ECM Attachment	Synthetic, Chemically Defined Attachment
Pluripotent stem cells	<ul style="list-style-type: none"> • Matrigel™ Matrix hESC-qualified 	<ul style="list-style-type: none"> • Mouse laminin/entacin complex 	<ul style="list-style-type: none"> • Human vitronectin 	<ul style="list-style-type: none"> • Thermo Scientific™ Nunclon™ Sphera™ • Thermo Scientific™ Nunclon™ Vita™ • Corning™ Synthemax™ Surface
Mesenchymal stem cells			<ul style="list-style-type: none"> • Human fibronectin 	<ul style="list-style-type: none"> • Corning™ PureCoat™ ECM Mimetic Fibronectin Peptide • Corning™ PuraMatrix™ Hydrogel
Endothelial progenitors		<ul style="list-style-type: none"> • Rat-tail collagen 	<ul style="list-style-type: none"> • Human fibronectin • Human collagen 	<ul style="list-style-type: none"> • Corning™ PureCoat™ ECM Mimetic Fibronectin or Collagen-I Peptide
Neuronal progenitors	<ul style="list-style-type: none"> • Matrigel™ Matrix 	<ul style="list-style-type: none"> • Poly-L-ornithine/mouse laminin 		<ul style="list-style-type: none"> • Corning™ Synthemax™ Surface • Corning™ PuraMatrix Hydrogel
Keratinocytes		<ul style="list-style-type: none"> • Rat-tail collagen 	<ul style="list-style-type: none"> • Human collagen 	<ul style="list-style-type: none"> • Corning™ PureCoat™ ECM Mimetic Collagen-I Peptide

Nunclon Sphera flasks, dishes and plates

- Allow cells to grow in suspension with virtually no cell attachment
- Minimise variability and supports the consistent formation of cancer spheroids that simulate the 3D structures of tumour growth
- Superior quality for embryoid body formation of pluripotent stem cells with minimal spontaneous differentiation
- Resultant cells are able to differentiate into all three germ layers



Cat. No	Alt. No	Description	Case qty	Pack qty
15227905	174925	Microwell 96U-well plate, round bottom, well volume 300µL	8	1
15237905	174927	Microwell 96F-well plate, flat bottom, well volume 400µL	8	1
15307036	174929	Microwell 96U-well plate, round bottom bulk pack	50	5
15277905	174932	Multidish 6-well, culture area 9.6cm ²	7	1
15267905	174931	Multidish 12-well, culture area 3.8cm ²	7	1
15257905	174930	Multidish 24-well, culture area 1.9cm ²	7	1
15287905	174943	Dish 35mm, culture area 8.8cm ²	20	5
15297905	174944	Dish 60mm, culture area 21.5cm ²	20	5
15207915	174945	Dish 90mm, culture area 56.7cm ²	20	5
15217915	174951	T25 cell culture flask, culture area 25 cm ²	18	6
15227915	174952	T75 cell culture flask, culture area 75cm ²	24	4

Multidish 6, Nunclon™ Vita

- Animal component-free surface
- Consistent performance from lot to lot
- Supports attachment and growth of temperamental cells (e.g. HEK 293, MSC)
- Supports attachment and expansion of human pluripotent stem cells in conditioned media containing Y27632 ROCK inhibitor
- Allows non-enzymatic dissociation of human pluripotent stem cells with removal of ROCK inhibitor

Nunclon Vita Surface supports attachment and growth of finicky cells (e.g. HEK 293, MSC) in the absence of feeder layers and matrix coatings. In conditioned media supplemented with ROCK inhibitor Y27632, human ESC can be cultured directly on the Nunclon Vita Surface for more than 10 passages while maintaining normal karyotype and pluripotency.

Feeder cell and extracellular matrix-free cultivation of human pluripotent stem cells using Thermo Scientific Nunc Nunclon Vita Surface and rho-kinase inhibition. This is another way of culturing stem cells without the usage of feeder cells to keep your stem cells from being contaminated.

Cat. No	Alt. No	Description	Case qty	Pack qty
11337694	145380	Multidish Nunclon Vita 6-well multidish 9.6cm ²	4	1

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Ultra low attachment flasks, dishes and plates



- Manufactured from optically clear virgin polystyrene
- Surface is non-cytotoxic, biologically inert, and nondegradable
- Supplied with vents to provide consistent gas exchange
- Sterilised by gamma irradiation and certified nonpyrogenic

Ultra low attachment surface features a covalently bound hydrogel layer that effectively inhibits cellular attachment and minimises protein absorption, enzyme activation, and cellular activation.

Spheroid plates have a novel well geometry that aids formation of spheroids in centre of the well and an optically clear round bottom with black opaque microplate body that allow low background fluorescence, minimal light scatter and reduced crosstalk. Those plates can be used for both top and bottom reading instruments.



Cat. No	Alt. No	Description	Case qty	Pack qty
10710114	3815	Ultra-low attachment 25cm ² rectangular canted neck sterile cell culture flask with vent cap	24	6
10491623	3814	Ultra-low attachment 75cm ² rectangular canted neck sterile cell culture flask with vent cap	24	4
10010582	3261	60mm ultra-low attachment culture dish, height 15mm	20	5
10000762	3262	100mm ultra-low attachment culture dish, height 20mm	20	5
15329740	4515	96 well clear black round bottom ultra-low attachment sterile spheroid microplate with lid	5	5
15308151	4520	96 well clear black round bottom ultra-low attachment sterile spheroid microplate with lid	50	10
15367850	3830	384 well black clear round bottom ultra-low attachment sterile spheroid microplate with lid	50	10
15354077	4516	384 well black clear round bottom ultra-low attachment sterile spheroid microplate with lid	5	5

96-well half area high content imaging microplate, Corning™ BioCoat™

- High optical quality and scratch-resistant glass
- Glass bottom thickness of 200µm is well suited for imaging microscopy
- Well bottom flatness <50µm to ensure planarity for imaging devices
- Low background fluorescence and minimal crosstalk to provide the highest possible optical quality for cell based assays
- Half area 96 well microplate reduces reagent consumption

Cat. No	Alt. No	Description	Case qty	Pack qty
15389860	4582	BioCoat™ Collagen I 96-well half area black/clear flat bottom high content imaging microplate, with lid	10	1
15309870	4584	BioCoat™ Fibronectin 96-well half area black/clear flat bottom high content imaging glass bottom microplates	10	1

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6-well plates Corning™ BioCoat™

- Improved transfection efficiencies of HES cells
- Easier DNA, RNA, and protein isolation
- Quality Assurance tested
- Ready-to-use convenience
- Optimised culture protocol
- Maintain only one cell type

When cultured on BD Matrigel Matrix, hES cells maintain normal karyotype, demonstrate a stable proliferation rate and high telomerase activity. They express characteristic undifferentiated hES cell markers and form teratomas in severe combined immunodeficient (SCID) mice and differentiate into cells from all three germ layers.

Cat. No	Alt. No	Description	Case qty	Pack qty
10556011	354603	BioCoat™ Matrigel™ Matrix thin layer 6-well clear flat bottom TC-treated multiwell plate, with lid, non-sterile	5	5
10681274	354671	BioCoat™ Matrigel™ 6-well plate for ES culture	5	5

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Stem cell factor

Glycoprotein playing a key role in hematopoiesis acting both as a positive and negative regulator, often in synergy with other cytokines and also in mast cell development, gametogenesis, and melanogenesis.

- Purity: >95%
- Tested for ability to promote proliferation of a human megakaryocytic leukemia cell line (Mo7e)
- Filtered (0.2µm membrane) and tested and found negative for bacteria, fungi and mycoplasma
- Tested for endotoxin (LAL assay)

Cat. No	Alt. No	Description	Quantity
11593530	354105	Stem Cell Factor (SCF), Human Recombinant	10µg



HyStem™ hydrogel kits

- Regulatory friendly substrate
- Extracellular matrix optimisation
- Peptide and growth factor incorporation
- 3-D stem cell culture

Product	Characteristics	Key features	Key benefits	Applications
HyStem	Chemically modified hyaluronan crosslinked with PEGDA	- Hyaluronan-based - Just add water and go - Can change formulation or stiffness before gelation	- Animal-free - Simple to use - Easy to modify	- User-designed surface coatings - Differentiation of neurospheres in bioreactors
HyStem-C	HyStem but with chemically modified gelatin added	Gelatin (or denatured collagen) is an excellent additive to start with when optimising your own matrix/surface	Starting point for optimising your own surface or matrix.	- Culture of neural progenitors, expansion and differentiation of neurons from neurospheres (depending on the ratio of HyStem to Gelin-S) - MSC differentiation
HyStem-HP	HyStem-C but with chemically modified heparin added	Contains heparin which acts by ionically binding to growth factors	Slow delivery of growth factors to cells	- Neural stem cell/NP cell culture - Culture of neural Schwann cells <i>in vitro</i>

Cat. No	Alt. No	Description	Quantity, mL
11557300	SV30138.01	HyStem Hydrogel Kit	2.5
11567300	SV30138.02	HyStem Hydrogel Kit	7.5
11577300	SV30139.01	HyStem-C Hydrogel Kit	2.5
11587300	SV30139.02	HyStem-C Hydrogel Kit	7.5
11597300	SV30140.01	HyStem-HP Hydrogel Kit	2.5
11507310	SV30140.02	HyStem-HP Hydrogel Kit	7.5

Matrigel™ Matrix

PuraMatrix™ is a synthetic matrix used to create defined 3D micro-environments for a variety of cell culture experiments. Studies have also demonstrated that the hydrogel supports the attachment of a variety of primary (eg neuronal, fibroblast, keratinocyte) and transformed (eg MG-63, SH-SY5Y, HEK293, NIH3T3) cell types.

- Mouse colonies routinely screened for pathogens via Mouse Antibody Production (MAP) testing
 - Extensive PCR testing is performed to screen for a number of pathogens
 - Tested and found negative for bacteria, fungi, and mycoplasma
 - Protein concentrations determined by Lowry method
 - Endotoxin units measured by Limulus Amoebocyte Lysate assay
 - Matrigel Matrix gel stability is tested for a period of 14 days at 37°C
 - Biological activity is determined for each lot using a neurite outgrowth assay
- Applications:
- Cell growth and differentiation
 - Metabolism/toxicology studies
 - Invasion assays
 - *In vitro* and *in vivo* angiogenesis assays
 - *In vivo* angiogenesis studies and augmentation of tumours in immunosuppressed mice

Cat. No	Alt. No	Description	Quantity
10365602	354248	Matrigel™ basement membrane matrix high concentration (HC)	10mL
11573560	354277	Matrigel™ hESC-Qualified Matrix	5mL
10255252	354250	PuraMatrix™ Peptide Hydrogel	5mL



HyClone HyCell-STEM media

- Increase rate of expansion
- Sustain healthy stem cell morphology
- Maintain stemness
- Preserve pluripotency
- Improved post-thaw recover

HyCell-STEM complete media is designed for culturing human embryonic stem cells (hESCs) and induced pluripotent stem (hiPS) cells with mouse embryonic fibroblast (MEF) feeder cells. This defined, serum-free formulation is used for expanding and maintaining stem cell colonies with daily or every-other-day feeds.

Cat. No	Alt. No	Description	Quantity
15296047	SR30003.KT	HyCell-STEM media kit for stem cells	1 kit
15216057	SR30004.KT	HyCell-STEM-FF media kit for feeder-free culture of stem cells	1 kit
15276057	SR30003.01	HyCell-STEM 6x supplement for stem cells	100mL
15236067	SR30004.01	HyCell-STEM-FF 6x supplement for feeder-free culture of stem cells	500mL

Cell culture medium and supplement, hMSC, stemgro™

Serum-free, defined medium for efficient expansion of hMSCs on Corning CellBIND™ surfaces. Sold as a kit of 450mL media, 50mL supplement.

Cat. No	Alt. No	Description	Quantity
15383701	40-410-KIT	Stemgro™ hMSC Medium kit	1 kit
15383661	25-800-CR	Insulin-Transferrin-Selenium (ITS)	10mL



HyClone AdvanceSTEM™ media for adult stem cell expansion

- HyClone AdvanceSTEM™ Mesenchymal Stem Cell Expansion Kit includes 1000mL of basal media and 100mL of AdvanceSTEM growth supplement and has been formulated to support expansion and maintenance of undifferentiated hMSCs
- Expansion medium and growth supplement should be used together, but are available as separate components

Cat. No	Alt. No	Description	Quantity
10745954	SH30875.KT	AdvanceSTEM Mesenchymal Stem Cell Expansion Kit. Kit contains: SH30878.01, SH30879.02	1 kit
10465045	SH30904.KT	AdvanceSTEM Amniotic Epithelial Expansion Kit. Kit contains: SH30878.02, SH30900.02	1 kit
10105453	SH30876.KT	AdvanceSTEM Adipogenic Differentiation Kit for Human Mesenchymal Stem Cells. Kit contains: SH30878.02, SH30886.02	1 kit
10309873	SH30892.KT	AdvanceSTEM Neural Differentiation Kit. Kit contains: SH30878.02, SH30893.02	1 kit
10195203	SH30877.KT	AdvanceSTEM Osteogenic Differentiation Kit for Human Mesenchymal Stem Cells. Kit contains: SH30878.02, SH30881.02	1 kit
10763004	SH30886.02	AdvanceSTEM Adipogenic Differentiation Medium	450mL
10554274	SH30889.02	AdvanceSTEM Chondrogenic Differentiation Medium	450mL
10084433	SH30893.02	AdvanceSTEM Neural Differentiation Medium	450mL
10454465	SH30881.02	AdvanceSTEM Osteogenic Differentiation Medium	450mL
10453125	SH30900.02	AdvanceSTEM Amniotic Epithelial Growth Medium	450mL
11566351	SH30879.01	AdvanceSTEM Basal Medium for Undifferentiated Human Mesenchymal Stem Cells	500mL
11576351	SH30879.02	AdvanceSTEM Basal Medium for Undifferentiated Human Mesenchymal Stem Cells	1,000mL
11556351	SH30878.01	AdvanceSTEM Stem Cell Growth Supplement	50mL
10115993	SH30878.02	AdvanceSTEM Stem Cell Growth Supplement	100mL



HyClone AdvanceSTEM™ classical media variations for stem cells

- AdvanceSTEM™ Low Osmo DMEM is basal medium developed to support growth and maintenance of ES cells in an undifferentiated state
- AdvanceSTEM™ DMEM4SC is formulated without L-glutamine or sodium pyruvate and is ideal for use with 129 ESCs
- AdvanceSTEM™ IMDM4SC contains no L-glutamine and supports excellent growth of B6 ESCs
- Formulations do not contain serum or LIF. Supplementation of 15-20% serum or AdvanceSTEM™ serum replacement is recommended

Cat. No	Alt. No	Description	Quantity
10131963	SH30824.01	AdvanceSTEM DMEM4SC, with 4500mg/L Glucose, without L-Glutamine and Sodium Pyruvate	500mL
10111773	SH30870.01	AdvanceSTEM Low Osmo DMEM without L-Glutamine	500mL
10474433	SH30822.01	AdvanceSTEM IMDM4SC, without L-Glutamine	500mL



HyClone AdvanceSTEM™ serum replacement

- Serum substitute for murine stem cell culture
- Formulated for use with AdvanceSTEM™ Classical Media for stem cells
- Does not contain serum
- Does not contain leukemia inhibitory factory (LIF); supplementation with LIF is required for mESC culture
- Recommended for use at a final concentration of 15 to 20%
- Not recommended for plating mouse embryonic feeder cells (MEFs)

Cat. No	Alt. No	Description	Quantity
10298033	SH30874.01	AdvanceSTEM Serum Replacement	50mL
10435743	SH30874.02	AdvanceSTEM Serum Replacement	100mL
10445743	SH30874.03	AdvanceSTEM Serum replacement	500mL



HyClone AdvanceSTEM™ cell qualified reagents

- DPBS, HEPES, L-glutamine and NEAA's specifically tested and validated for stem cell culture

Cat. No	Alt. No	Description	Quantity
12310103	SH30850.02	AdvanceSTEM™ ES Qualified Dulbecco's Phosphate Buffered Saline (DPBS), without Calcium or Magnesium	500mL
11526331	SH30850.03	AdvanceSTEM™ ES Qualified Dulbecco's Phosphate Buffered Saline (DPBS), without Calcium or Magnesium	1L
10406893	SH30851.01	AdvanceSTEM™ ES Qualified HEPES Buffer	100mL
10101773	SH30852.01	AdvanceSTEM™ ES Qualified L-Glutamine, 200mM	100mL
10304783	SH30853.01	AdvanceSTEM™ ES Qualified Non-Essential Amino Acids (100X)	100mL



CET human stem cells

Cat. No	Alt. No	Description	Quantity
10370014	SV30101.01	CET Human Wharton's Jelly Mesenchymal stem cells, 100,000 cells	1 Vial - 2mL
10771454	SV30101.02	CET Human Wharton's Jelly Mesenchymal stem cells, 500,000 cells	1 Vial - 2mL
10443485	SV30102.01	CET Human Adipose-Derived Mesenchymal stem cells, 100,000 cells	1 Vial - 2mL
10573544	SV30102.02	CET Human Adipose-Derived Mesenchymal stem cells, 500,000 cells	1 Vial - 2mL
10677394	SV30103.01	CET Human Amniotic Mesenchymal stem cells, 100,000 cells	1 Vial - 2mL
10503564	SV30103.02	CET Human Amniotic Mesenchymal stem cells, 500,000 cells	1 Vial - 2mL
10688544	SV30104.01	CET Human Amniotic Epithelial stem cells, 100,000 cells	1 Vial - 2mL
10475595	SV30104.02	CET Human Amniotic Epithelial stem cell, 500,000 cells	1 Vial - 2mL
10513564	SV30105.01	CET Human Multipotent Cord Blood Unrestricted Somatic stem cells, 100,000 cells	1 Vial - 2mL
10731654	SV30105.02	CET Human Multipotent Cord Blood Unrestricted Somatic stem cells, 500,000 cells	1 Vial - 2mL
12380253	SV30110.01	CET Human Bone Marrow Mesenchymal stem cells, 100,000 cells	1 Vial - 2mL
12390253	SV30110.02	CET Human Bone Marrow Mesenchymal stem cells, 500,000 cells	1 Vial - 2mL



HyClone AdvanceSTEM™ and HyCryo™ cryopreservation media

HyCryo™ media

Animal origin free cryopreservation media for general use.

HyCryo™-STEM

Impressive cell recovery and post-thaw growth of pluripotent stem cells (ESC and iPSC) and neural progenitor cells such as mouse cortical stem cells (MCSCs) and rat cortical stem cells (RCSCs). The serum-free formulation maintains differentiation potential and minimises spontaneous differentiation of stem cells.

Cat. No	Alt. No	Description	Quantity
10136473	SH30894.01	AdvanceSTEM Cryopreservation Medium	100mL
13493809	SR30001.02	HyCryo 2x Cryopreservation Media	100mL
13403819	SR30002.02	HyCryo-STEM 2x Cryopreservation Media	100mL

Fisher Scientific in collaboration with key brands in the cell culture market:



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New brochures coming soon!

- Specialised cell culture
- Basic cell culture



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Genomics



Proteomics



Cell Biology



Microbiology

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