

# Corning® Media for Stem Cell Research

CORNING

## Human Embryonic Stem Cells

Human embryonic stem cells (hESCs) are derived 4 to 5 days after fertilization from early stage human embryos known as blastocysts. When human embryos reach the blastocyst stage, they will contain approximately 15 to 150 cells. hESCs are pluripotent, cells that are capable of differentiating into all three of the primary germ layers, which makes them ideal for research purposes. These germ layers consist of the mesoderm, endoderm, and ectoderm. To propagate the hESCs, media such as Dulbecco's Modification of Eagle's Medium, Ham's F-12 50/50 Mix, Fetal Bovine Serum (FBS), and rhAlbumin can be used.

## Cryopreservation

If cells are not intended for immediate use, they can be stored using cryopreservation. The most common cryoprotectant is Dimethyl Sulfoxide (DMSO). The recommended amount of DMSO will depend on the type of stem cells in use, and ranges from 5% to 10% DMSO when used in combination with appropriate media.

Often other reagents are added in addition to the DMSO, such as L-glutamine or 45% glucose solution, to promote cell preservation by minimizing the chances of extracellular or intracellular ice crystal formation, as well as preventing dehydration.



## Ordering Information

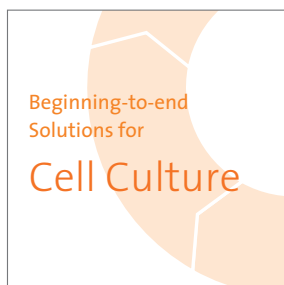
Cat. No.	Description	Unit Size	Qty/Pk
35-074-CV	Fetal bovine serum, premium quality, US origin, ES cell tested	500 mL	1
35-010-CV	Fetal bovine serum, USDA approved source	500 mL	1
35-011-CV	Fetal bovine serum, USDA approved source, heat inactivated	500 mL	1
35-015-CV	Fetal bovine serum, US sourced	500 mL	1
35-016-CV	Fetal bovine serum, US sourced, heat inactivated	500 mL	1
25-025-CI	MEM nonessential amino acids	100 mL	6
25-005-CI	L-Glutamine, liquid	100 mL	6
25-015-CI	Corning® glutagro™ (Dipeptide L-Glut)	100 mL	1
61-030-RM	L-Glutamine, powder	100 g	1
25-051-CI	0.05% Trypsin EDTA, 1x	100 mL	6
30-002-CI	Penicillin-Streptomycin solution, 100x	100 mL	6
25-056-CI	Corning Cellstripper™, liquid	100 mL	6
10-090-CV	DMEM/Ham's F-12 50/50 mix, (modified)	500 mL	6
10-013-CV	DMEM, 1x	500 mL	6
21-031-CV	DPBS, 1x without calcium and magnesium	500 mL	6
25-950-CQC	DMSO	250 mL	1
25-037-CI	45% Glucose solution	100 mL	1
62-450-RF	rhAlbumin	1 g	1

## Corning® stemgro® hMSC Medium

Cat. No	Description	Size	Qty/Pk
40-410-KIT	stemgro basal medium	450 mL	1
	stemgro supplement	50 mL	1

For more specific information on claims, visit the Certificates page at [www.corning.com/lifesciences](http://www.corning.com/lifesciences).

**Warranty/Disclaimer:** Unless otherwise specified, all products are for research use only. Not intended for use in diagnostic or therapeutic procedures. Not for use in humans. Corning Life Sciences makes no claims regarding the performance of these products for clinical or diagnostic applications.



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It is this expertise, plus a 160-year history of Corning innovation and manufacturing excellence, that puts us in a unique position to offer a beginning-to-end portfolio of high-quality, reliable cell culture consumables.

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