Beginning-to-end Solutions for

# Stem Cell Research

# CORNING



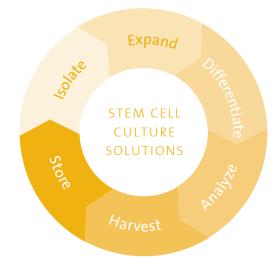
## BEGINNING-TO-END SOLUTIONS FOR STEM AND PRIMARY CELL RESEARCH

The science of stem cell culture has advanced rapidly since its beginnings in the 1980s, as has the technology behind this research. From feeder-free substrates, to defined media, to scalable cell expansion systems, continual advances in stem cell culture have inspired Corning to develop innovative new tools to support this groundbreaking work.

Corning was a leader in disposable cell cultureware during the exciting early days of stem cell culture. Today, we continue to work with researchers, providing high quality cell culture consumables, as well as the latest technologies, including defined cell culture surfaces, xeno-free culture media, and scalable cell expansion vessels for stem cells, primary cells, and other cell types.

This brochure highlights some of the key Corning products that are used throughout the stem cell workflow. Detailed product information and a complete technical library can be found at **www.corning.com/lifesciences** and **www.cellgro.com**.

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



## BEGINNING-TO-END SOLUTIONS FOR STEM CELL RESEARCH

#### **Surfaces for Primary and Stem Cell Culture**

Find the optimal surface for expanding your cells.

|                            | Complex<br>Attachment  | Purified ECM<br>Attachment           | Human-derived<br>ECM Attachment         | Synthetic, Chemically<br>Defined Attachment   |
|----------------------------|--|--------------------------------------|---|---|
| Pluripotent<br>Stem Cells  | <ul> <li>Matrigel<sup>®</sup> Matrix<br/>hESC-qualified</li> </ul> | • Mouse Lamin/Entacin<br>Complex     | • Human Vitronectin                     | • Corning <sup>®</sup> Synthemax <sup>®</sup> Surface   |
| Mesenchymal<br>Stem Cells  |  |                                      | • Human Fibronectin                     | <ul> <li>Corning PureCoat<sup>™</sup> ECM Mimetic<br/>Fibronectin Peptide</li> <li>Corning PuraMatrix<sup>™</sup> Hydrogel</li> </ul> |
| Endothelial<br>Progenitors |  | • Rat-tail Collagen                  | • Human Fibronectin<br>• Human Collagen | • Corning PureCoat ECM Mimetic<br>Fibronectin or Collagen-I Peptide   |
| Neuronal<br>Progenitors    | • Matrigel Matrix  | • Poly-L-Orinthine/<br>Mouse Laminin |   | Corning Synthemax Surface     Corning PuraMatrix Hydrogel   |
| Keratinocytes              |  | • Rat-tail Collagen                  | • Human Collagen                        | Corning PureCoat ECM Mimetic     Collagen-I Peptide   |

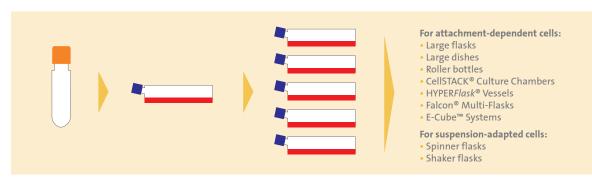
#### Media and Growth Factors for Stem Cell Culture

Corning media and supplements include classical formulations, as well as serum-free and specialty media.

| Classical Media  | Serum  | Serum Free   | Xeno-/Animal-free  |
|--|--|--|--|
| <ul> <li>DMEM with high glucose</li> <li>DMEM with low glucose</li> <li>DMEM with glutagro<sup>™</sup><br/>Supplement</li> <li>MEM</li> <li>MEM Alpha</li> <li>IMDM</li> <li>RPMI</li> </ul> | <ul> <li>Fetal Bovine Serum (FBS),<br/>Regular and Premium</li> <li>Heat Inactivated FBS</li> <li>Specialty FBS</li> <li>Human AB Serum</li> </ul> | • ITS<br>• MITO<br>• Delipidized albumin<br>• Growth factors<br>• Trace elements A, B, C | <ul> <li>stemgro<sup>®</sup> hMSC Medium<br/>and Supplement</li> <li>Recombinant growth<br/>factors</li> <li>Recombinant albumin</li> <li>Recombinant lactoferrin</li> </ul> |

#### **Vessels for Stem Cell Culture**

Simplify scale-up with Corning culture vessels designed for each stage of the cell culture workflow.



### ISOLATION AND DERIVATION

#### **Corning Products for Isolation and Derivation**

- Advanced surfaces
- Cell strainers and centrifuge tubes
- Pipet tips and pipettors
- Pipets and pipet controllers
- Corning<sup>®</sup> SMC4 Small Molecule Cocktail
- Syringe and filter systems
- Tissue homogenizers
- Trypsin and reagents



Products for primary or stem cell isolation and derivation include tools for tissue extraction, ECMs for isolation of primary or progenitor cells, reagents for enhancing iPSC reprogramming, and novel vessels for continuous feeding during prolonged derivation and differentiation protocols.

**1. Corning SMC4 Small Molecule Cocktail:** an optimized supplement of specific signaling pathway inhibitors. When used in conjunction with Corning Matrigel® Matrix, Corning SMC4 has been shown to enhance hiPSC reprogramming efficiency, enable single cell passaging, and to improve recovery from hiPSC cryopreservation.

**2. PYREX® Tissue Homogenizers and Cell Strainers:** provide rapid isolation of primary cells from tissue allowing for a consistently uniform single-cell suspension. Corning also offers cell dissociation reagents including trypsin, Dispase, and non-enzymatic Cell Recovery Solution.

**3. Advanced Surfaces:** include Corning Matrigel Matrix and a wide variety of biological and xeno-free extracellular matrices for stem, progenitor or primary cell isolation. In addition to biological attachment products, Corning has an extensive line of synthetic tissue culture treated surfaces and ECM Mimetic peptide-coated cultureware for applications requiring defined conditions.



## EXPANSION

## Corning Products for Expansion

- Corning<sup>®</sup> FloWell<sup>™</sup> 2W Perfusion Plate
- Corning Matrigel<sup>®</sup> Matrix and Defined Extracellular Matrices
- Corning Synthemax<sup>®</sup> Surface and Corning PureCoat<sup>™</sup> ECM Mimetic Surfaces
- Microcarriers
- Dishes, flasks, and plates
- Media, serum, and serum-free supplements
- Multi-layer vessels, including the Falcon<sup>®</sup> Multi-Flask, Corning HYPERFlask,<sup>®</sup> CellSTACK<sup>®</sup> and HYPERStack<sup>®</sup> product lines.
- Corning stemgro<sup>®</sup> hMSC Medium and Supplement



Novel and scalable environments for stem and primary cell types for cell expansion in basic and clinical research applications.

**1. Corning Matrigel Matrix:** The original, most widely referenced extracellular matrix for hESC, hiPSC and adult stem cell expansion in serum or serum-free culture environments. Cited in thousands of experiments for robust, biologically functional 2D and 3D stem cell culture. Formulations include growth factor-reduced and high protein concentration, as well as hESC-qualified, which has been pre-qualified with mTeSR<sup>™</sup> defined, feeder-free cell culture medium from Stem Cell Technologies.

2. Corning Synthemax Surface and ECM Mimetic Cultureware: Synthetic, animal-free peptide substrates and surfaces for serum, xeno- or animal-free expansion of stem cells where defined conditions are required. Corning Synthemax Surface is a Vitronectin-based peptide optimized for pluripotent stem cells and neural stem cells. Corning PureCoat™ ECM Mimetic Cultureware is available with either a Fibronectin or Collagen I mimetic peptide coating for expanding hMSCs, Keratinocytes, and progenitor cells. Substrates and surfaces are manufactured according to cGMPs, are room temperature stable, and are scalable.



**3. Corning® FloWell™ 2W Plate:** Multiple well plate designed with continuous fluid flow technology for controlled feeding of cells for up to 72 hours. Ideal cell feeding system for protocols that require frequent medium changes, such as during pluripotent stem cell induction and subsequent PSC expansion. Compatible with both Corning Matrigel® Matrix and Corning Synthemax® Surface self-coating protocols.

**4. Multi-layered Flasks:** Choose from a variety of sizes and surfaces, including 3- and 5-layer Falcon<sup>®</sup> Multi-Flasks with tissue culture treated surfaces or Corning PureCoat<sup>™</sup> ECM Mimetic Fibronectin or Collagen-I synthetic peptide surfaces. For larger cell expansion needs, the Corning HYPER*Flask*<sup>®</sup> vessel has 10 interconnected, polystyrene, gas permeable growth surfaces and 1720 cm<sup>2</sup> available growth area.

**5. Corning HYPERStack® Vessel:** Closed system with 6,000 cm<sup>2</sup> of cell growth area; chemically resistant heat-sealable flexible tubing for liquid handling manipulations, proprietary gas-permeable film technology, and low particulate assembly. Excellent option for cell therapy applications.

**6. Corning Microcarriers** are sterile (SAL 10<sup>-6</sup>), ready to use, and available in closed systems packaging that can be used directly with bioreactors. USP Class VI polystyrene beads are available with either Corning CellBIND<sup>®</sup> Surface or Corning Synthemax Surface for PSC and stem cell expansion.

**7. Media, Sera, and Serum-free Factors:** The Corning cellgro<sup>®</sup> line includes a broad range of standard and custom media and molecular biology reagents for tissue and cell culture that support superior growth and viability of suspension and adherent cell cultures.

8. Corning stemgro® hMSC Medium and Supplement: Xeno-free, chemically-defined medium provides maximum expansion of human mesenchymal stem cells (hMSCs) derived from bone marrow, cord blood, or adipose tissue. Use with cell culture vessels featuring Corning CellBIND Surface to create a completely animal-free hMSC expansion environment that eliminates the need for coating with biological materials.

**9. Extracellular Matrices and Attachment Factors:** Corning offers a wide variety of biological, xenofree and synthetic attachment options for stem cell, progenitor or primary cell expansion. Corning ECMs include mouse Laminin, Laminin/Entactin complex, rat tail Collagen I, human Collagen I, III, IV, V, VI, human Fibronectin and human Vitronectin.



## DIFFERENTIATION

#### **Corning Products for** Differentiation

- Corning<sup>®</sup> Matrigel<sup>®</sup> Matrix and defined extracellular matrices
- Dishes, flasks, and plates
- Growth factors, serum-free media supplements
- Media, serum, and reagents
- Multilayer vessels including the Falcon<sup>®</sup> Multi-Flask, Corning HYPER*Flask<sup>®</sup>* and HYPER*Stack<sup>®</sup>* product lines
- Ultra-Low Attachment plates, dishes and flasks



Optimize the cell culture environment to direct cell differentiation and specialization with Corning's tools and technologies.

**1. Corning Extracellular Matrices:** Choose from a wide variety of animal- or human-derived biological ECMs as well as synthetic ECM options for 2D and 3D stem cell differentiation. Use our differentiation guide to determine the optimal ECM for the differentiation of hPSCs or progenitor cell types to specific differentiated states.

**2. Growth Factors and Cytokines:** Corning offers a comprehensive line of high quality cytokines and media additives that allow propagation and differentiation of cells under defined, serum-reduced or serum-free conditions.

**3. Corning Ultra-Low Attachment Surface:** stable, noncytotoxic and biologically inert hydrogel-coated surface that prevents cell attachment while enabling embryoid body formation and cell differentiation. Available in a variety of vessel formats, including round bottom 96 well cell culture plates, standard multiwell plates, dishes, and scalable cell culture flasks.

**4. Corning Osteo Assay Surface:** unique 3-dimensional bone biomimetic synthetic surface for osteoblast and osteoclast differentiation and functional studies. Available in 24 and 96 well plates and in a Corning Stripwell<sup>™</sup> microplate.





## ANALYSIS

#### Corning Products for Analysis

- Biologically coated microplates in HTS formats
- Corning<sup>®</sup> Matrigel<sup>®</sup> Matrix, high concentration (*in vivo* delivery)
- Corning PuraMatrix™ Peptide Hydrogel (in vivo delivery)
- Corning Osteo Assay Surfaces
- Dishes, flasks, and plates
- Media, sera, reagents
- Corning Transwell<sup>®</sup>
   Permeable Supports
- Pipet tips and pipettors
- Pipets and pipet controllers
- Slides and coverslips
- Ultra-Low Attachment plates, dishes, flasks (embryoid bodies)



Tools for in vitro and in vivo analysis of stem, progenitor, and differentiated cell types.

#### In vivo

**1. Corning Matrigel Matrix, high concentration (HC):** Biocompatible delivery scaffold for the study of stem or differentiated cell functionality *in vivo*. Higher protein concentration provides increased gelation and matrix stiffness. Ideal for augmenting cell transplantation *in vivo*. Available in standard phenol-red free and growth-factor-reduced formulations.

**2. Corning PuraMatrix Peptide Hydrogel:** Fully synthetic, animal-free, peptide-based hydrogel for *in vivo* tissue regeneration research. Stable, biocompatible scaffold with demonstrated utility in myo-cardial, osteogenic or chondrocyte engraftment of cells for tissue regeneration.

#### In vitro

**3. Corning BioCoat™ Cultureware:** Biologically coated cultureware in a variety of surface treatments. Provides enhanced cell attachment and growth for primary, stem and progenitor cell types. Options include Human Collagen I and IV, Human Fibronectin, Laminin, Poly-L-Lysine, Poly-D-Lysine, Poly-L-Orinthine/Laminin and custom coatings. Available on a range of scalable vessel types, including dishes, microplates, flasks and permeable supports.



## HARVEST

#### Corning Products for Harvest

- Benchtop equipment
- Cell dissociation reagents
- Buffered salt solutions
- Cell scrapers
- Centrifuge tubes and cell strainers
- Media and sera
- Pipet tips and pipettors
- Pipets and pipet controllers
- Slides and coverslips
- Syringe and filter systems



Pipets, centrifuge tubes, cell scrapers, and reagents to make cell harvesting easier.

**1. Corning® Cell Recovery Solution:** A non-enzymatic cell recovery solution recommended for recovering cells from Corning Matrigel® Matrix without damaging membrane-bound receptors, or cell:cell interactions.

**2. Corning Dispase:** An animal-free, bacillus-derived, neutral metalloprotease that is recommended for recovering cells from Corning Matrigel Matrix. Dispase cleaves fibronectin and collagen bonds in Corning Matrigel Matrix to release cells without damaging membrane-bound receptors or cell:cell interactions.

**3. Trypsin EDTA 1X:** Enzymatically release adherent cells from tissue culture plates for passaging. Divalent cations, such as calcium and magnesium, which are often present in the cell culture environment, inhibit this action. EDTA sequesters these ions, which enhances the efficacy of Trypsin.



## STORE

#### Corning<sup>®</sup> Products for Storage

- Centrifuge tubes
- Cryogenic bags, vials and accessories
- DMSO (Dimethyl Sulfoxide)
- Media, sera, reagents
- Pipet tips and pipettors
- Pipets and pipet controllers
- Corning SMC4 Small Molecule Cocktail



Storage Solutions for Stem Cell Culture

Minimize the stresses on cultures during storage and maximize their subsequent recovery and survival with Corning storage solutions.

**1. Cryogenic vials and accessories:** Corning offers a variety of externally and internally threaded vials, as well as externally threaded vials with a plug seal cap. All vials are sterilized by gamma irradiation and are nonpyrogenic.

**2. Cryopreservation bags:** single-use containers designed for storage, preservation and transfer of cells. Unique bag film remains flexible at ultra-low temperatures (-196°C) while remaining flexible and translucent when filled with liquid. Proprietary membrane port design offers thinner walls for increased flexibility, and attached cap minimizes membrane exposure during freezing.

**3. Corning SMC4 Small Molecule Cocktail:** an optimized supplement used in conjunction with Corning Matrigel<sup>®</sup> Matrix to enhance hiPSC reprogramming efficiency and improve cell yield and viability during recovery from cryopreservation.



## PRODUCT ORDERING INFORMATION

## Analyze

| Cat. No.  | Brand    | Description   | Qty/Pk | Qty/Cs |
|-----------|----------|---|--------|--------|
| 354250    | Corning® | PuraMatrix™ Peptide Hydrogel, 5 mL  | 1      | 1      |
| 354248    | Corning  | Matrigel® Basement Membrane Matrix, High Concentration (HC), LDEV-Free, 10 mL         | 1      | 1      |
| Different | iate     |   |        |        |
| 354005    | Corning  | 2.5S Nerve Growth Factor (NGF), Mouse Natural, 10 μg                                  | 1      | 1      |
| 356005    | Corning  | 2.5S Nerve Growth Factor (NGF), Mouse Natural, 1 mg, 2 x 500 μg                       | 1      | 1      |
| 356004    | Corning  | 2.5S Nerve Growth Factor (NGF), Mouse Natural, 100 μg                                 | 1      | 1      |
| 354009    | Corning  | 7S Nerve Growth Factor (NGF), Mouse Natural, 100 μg                                   | 1      | 1      |
| 356037    | Corning  | Basic Fibroblast Growth Factor (bFGF), Bovine Natural, 10 μg                          | 1      | 1      |
| 354060    | Corning  | Basic Fibroblast Growth Factor (bFGF), Human Recombinant, 10 μg                       | 1      | 1      |
| 356060    | Corning  | Basic Fibroblast Growth Factor (bFGF), Human Recombinant, 50 µg, 5 x 10 µg            | 1      | 1      |
| 356061    | Corning  | Basic Fibroblast Growth Factor (bFGF), Human Recombinant, 100 µg, 10 x 10 µg          | 1      | 1      |
| 354123    | Corning  | Bovine Pituitary Extract (BPE), 15 mg   | 1      | 1      |
| 356123    | Corning  | Bovine Pituitary Extract (BPE), 75 mg   | 1      | 1      |
| 354052    | Corning  | Epidermal Growth Factor (EGF), Human Recombinant, 100 μg                              | 1      | 1      |
| 356052    | Corning  | Epidermal Growth Factor (EGF), Human Recombinant, 1 mg, 10 x 100 μg                   | 1      | 1      |
| 354001    | Corning  | Epidermal Growth Factor (EGF), Mouse Natural (Culture Grade), 100 μg                  | 1      | 1      |
| 356001    | Corning  | Epidermal Growth Factor (EGF), Mouse Natural (Culture Grade), 1 mg, 10 x 100 μg       | 1      | 1      |
| 354010    | Corning  | Epidermal Growth Factor (EGF), Mouse Natural (Receptor Grade), 100 μg                 | 1      | 1      |
| 356010    | Corning  | Epidermal Growth Factor (EGF), Mouse Natural (Receptor Grade), 500 μg, 5 x 100 μg     | 1      | 1      |
| 354037    | Corning  | Insulin-like Growth Factor (IGF-I), Human Recombinant (Culture Grade), 10 μg          | 1      | 1      |
| 354051    | Corning  | Platelet-Derived Growth Factor-BB (PDGF-BB), Human Recombinant, 10 μg                 | 1      | 1      |
| 356051    | Corning  | Platelet-Derived Growth Factor-BB (PDGF-BB), Human Recombinant, 100 μg, 10 x 10 μg    | 1      | 1      |
| 354039    | Corning  | Transforming Growth Factor- $\beta$ (TGF- $\beta$ ), Human Natural, 1 µg              | 1      | 1      |
| 354105    | Corning  | Stem Cell Factor (SCF), Human Recombinant, 10 μg                                      | 1      | 1      |
| 356039    | Corning  | Transforming Growth Factor-β (TGF-β), Human Natural, 5 $\mu$ g, 1 x 5 $\mu$ g         | 1      | 1      |
| 356040    | Corning  | Transforming Growth Factor- $\beta$ (TGF- $\beta$ ), Human Natural, 10 µg, 5 x 2 µg   | 1      | 1      |
| 354066    | Corning  | Tumor Necrosis Factor- $\alpha$ (TNF- $\alpha$ ) Human Recombinant, 10 µg             | 1      | 1      |
| 356066    | Corning  | Tumor Necrosis Factor- $\alpha$ (TNF- $\alpha$ ), Human Recombinant, 50 µg, 5 x 10 µg | 1      | 1      |
| 354107    | Corning  | Vascular Endothelial Growth Factor (VEGF), Human Recombinant, 10 µg                   | 1      | 1      |
| 354006    | Corning  | Endothelial Cell Growth Supplement (ECGS), 15 mg                                      | 1      | 1      |
| 356006    | Corning  | Endothelial Cell Growth Supplement (ECGS), 100 mg                                     | 1      | 1      |
| 354203    | Corning  | Hydrocortisone, 50 mg   | 1      | 1      |
| 354351    | Corning  | ITS Premix, 5 mL, 5L Equivalent   | 1      | 1      |
| 354350    | Corning  | ITS Premix, 20 mL, 20L Equivalent   | 1      | 1      |
| 354352    | Corning  | ITS+ Premix, 20 mL  | 1      | 1      |
| 354227    | Corning  | Linoleic Acid/Albumin Complex, 2.5/500 mg   | 1      | 1      |
| 355006    | Corning  | MITO+ Serum Extender, 5 mL  | 1      | 1      |
| 355104    | Corning  | Nu-Serum™ IV Growth Medium Supplement, 100 mL   | 1      | 1      |
| 355504    | Corning  | Nu-Serum IV Growth Medium Supplement, 500 mL  | 1      | 1      |
| 355500    | Corning  | Nu-Serum Growth Medium Supplement, 500 mL   | 1      |        |
| 355100    | Corning  | Nu-serum Growth Medium Supplement, 100 mL   | 1      | 1      |
| 354201    | Corning  | Selenous Acid (Sodium Salt), 100 mg   | 1      |        |
| 354201    | 0        | T-Cell Culture Supplement with conA (IL-2 Culture Supplement), Rat, 100 mL            |        | 1      |
| 354115    | Corning  | T-Cell Culture Supplement with conA (IL-2 Culture Supplement), Rat, 100 mL            | 1      | 1      |
|           | Corning  |   | 1      | 1      |
| 354304    | Corning  | Transferrin, Human (Holo), 1 g  | 1      | 1      |
| 354204    | Corning  | Transferrin, Human (Holo), 10 mg  | 1      | 1      |

| Brand    | Description  | Qty/Pk   | Qty/Cs  |
|----------|--|--|---|
| Corning® | 60 mm Ultra-Low Attachment Culture Dish  | 5  | 20  |
| Corning  | 100 mm Ultra-Low Attachment Culture Dish   | 5  | 20  |
| Corning  | 25 cm <sup>2</sup> Ultra-Low Attachment Rectangular Canted Neck Cell Culture Flask with Vent Cap | 6  | 24  |
| Corning  | 75 cm <sup>2</sup> Ultra-Low Attachment Rectangular Canted Neck Cell Culture Flask with Vent Cap | 4  | 24  |
| Costar   | 96 Well Clear Flat Bottom Ultra-Low Attachment Microplate, with Lid, Sterile                     | 1  | 24  |
| Costar   | 96 Well Clear Round Bottom Ultra-Low Attachment Microplate, with Lid, Sterile                    | 1  | 24  |
| Costar   | 6 Well Clear Flat Bottom Ultra-Low Attachment Multiple Well Plates, Sterile                      | 1  | 24  |
| Costar   | 24 Well Clear Flat Bottom Ultra-Low Attachment Multiple Well Plates, Sterile                     | 1  | 24  |
|          | Corning®<br>Corning<br>Corning<br>Corning<br>Costar<br>Costar<br>Costar                          | Corning®60 mm Ultra-Low Attachment Culture DishCorning100 mm Ultra-Low Attachment Culture DishCorning25 cm² Ultra-Low Attachment Rectangular Canted Neck Cell Culture Flask with Vent CapCorning75 cm² Ultra-Low Attachment Rectangular Canted Neck Cell Culture Flask with Vent CapCostar96 Well Clear Flat Bottom Ultra-Low Attachment Microplate, with Lid, SterileCostar96 Well Clear Round Bottom Ultra-Low Attachment Microplate, with Lid, SterileCostar6 Well Clear Flat Bottom Ultra-Low Attachment Microplate, Sterile | Corning®60 mm Ultra-Low Attachment Culture Dish5Corning100 mm Ultra-Low Attachment Culture Dish5Corning25 cm² Ultra-Low Attachment Rectangular Canted Neck Cell Culture Flask with Vent Cap6Corning75 cm² Ultra-Low Attachment Rectangular Canted Neck Cell Culture Flask with Vent Cap4Costar96 Well Clear Flat Bottom Ultra-Low Attachment Microplate, with Lid, Sterile1Costar96 Well Clear Round Bottom Ultra-Low Attachment Microplate, with Lid, Sterile1Costar6 Well Clear Flat Bottom Ultra-Low Attachment Multiple Well Plates, Sterile1 |

## Expand

| •         |         |  |   |    |
|-----------|---------|--|---|----|
| 356270    | Corning | PureCoat™ ECM Mimetic Collagen I Peptide 6 Well Plate  | 5 | 10 |
| 356240    | Corning | PureCoat ECM Mimetic Fibronectin Peptide 6 Well Plate  | 1 | 10 |
| 356271    | Corning | PureCoat ECM Mimetic Collagen I Peptide 24 Well Plate  | 5 | 10 |
| 356241    | Corning | PureCoat ECM Mimetic Fibronectin Peptide 24 Well Plate   | 5 | 50 |
| 356272    | Corning | PureCoat ECM Mimetic Collagen I Peptide 75 cm <sup>2</sup> Flask   | 5 | 10 |
| 356242    | Corning | PureCoat ECM Mimetic Fibronectin Peptide 75 cm <sup>2</sup> Flask  | 5 | 10 |
| 356273    | Corning | PureCoat ECM Mimetic Collagen I Peptide 175 cm <sup>2</sup> Flask  | 5 | 10 |
| 356243    | Corning | PureCoat ECM Mimetic Fibronectin Peptide 175 cm <sup>2</sup> Flask   | 5 | 10 |
| 3972XX1   | Corning | Synthemax®-T Surface 75 cm² Rectangular Canted Neck Cell Culture Flask with Vent, Sterile  | 1 | 2  |
| 3984      | Corning | Synthemax-R Surface 75 cm <sup>2</sup> Rectangular Canted Neck Cell Culture Flask with Vent, Sterile                             | 1 | 12 |
| 3983XX1   | Corning | Synthemax-R Surface 75 cm <sup>2</sup> Rectangular Canted Neck Cell Culture Flask with Vent, Sterile                             | 1 | 2  |
| 3976XX1   | Corning | Synthemax-T Surface 225 cm <sup>2</sup> Rectangular Canted Neck Cell Culture Flask with Vent, Sterile                            | 1 | 2  |
| 3977XX1   | Corning | Synthemax-T Surface 225 cm <sup>2</sup> Rectangular Canted Neck Cell Culture Flask with Vent, Sterile                            | 1 | 12 |
| 354277    | Corning | Matrigel® Matrix hESC-qualified, LDEV-Free, 5 mL   | 1 | 1  |
| 10030     | Corning | CellBIND <sup>®</sup> Surface HYPER <i>Flask<sup>®</sup></i> M Cell Culture Vessel, Treated, Sterile, Bar Coded                  | 1 | 4  |
| 10034     | Corning | CellBIND Surface HYPERFlask M Cell Culture Vessel, Treated, Sterile, Bar Coded   | 4 | 24 |
| 10020     | Corning | CellBIND Surface HYPERFlask M Cell Culture Vessel, Treated, Sterile, Bar Coded   | 4 | 4  |
| 10012     | Corning | CellBIND Surface HYPERStack <sup>®</sup> 12-Layer Cell Culture Vessel  | 1 | 4  |
| 10013     | Corning | Not Treated Surface HYPERStack 12-Layer Cell Culture Vessel  | 1 | 4  |
| 10036     | Corning | CellBIND Surface HYPERStack 36-Layer Cell Culture Vessel   | 1 | 2  |
| 10037     | Corning | Not Treated Surface HYPERStack 36-Layer Cell Culture Vessel  | 1 | 2  |
| 10040     | Corning | HYPERStack Cell Culture Vessel Stainless Steel Filling Wedge   | 1 | 1  |
| 10041     | Corning | HYPERStack Cell Culture Vessel Bottle Stand  | 1 | 1  |
| 10042     | Corning | Disposable Tubing Set for Use with Glass Bottle, 3/8 ID x 1/2 OD, ADCF, 18" in Length, Sterile                                   | 1 | 2  |
| 10043     | Corning | Disposable Tubing Set for use with 850 cm² Polystyrene Roller Bottle, 3/8 ID x 1/2 OD, ADCF,<br>0.2 μm Filter, MPC Quick Connect | 1 | 2  |
| 10044     | Corning | HYPERStack ABS Stacking Tray   | 1 | 5  |
| 10045     | Corning | HYPER <i>Viewer</i> ™ Device   | 1 | 1  |
| 11000     | Corning | HYPERStack Stainless Steel Manipulator   | 1 | 1  |
| 3487XX1   | Corning | FloWell™ 2W TC-Treated Multiple Well Plates, irradiated  | 1 | 24 |
| 10-013-CV | Corning | cellgro® 500 mL DMEM (Dulbecco's Modification of Eagle's Medium) 4.5 g/L glucose, L-glutamine, and sodium pyruvate               | 6 | 6  |
| 10-016-CV | Corning | cellgro 500 mL Iscove's Modification of DMEM w/ L-glutamine  | 6 | 6  |
| 10-090-CV | Corning | cellgro 500 mL DMEM (Dulbecco's Modification of Eagle's Medium)/Ham's F-12 50/50 Mix with L-glutamine                            | 6 | 6  |
| 10-092-CV | Corning | cellgro 500 mL DMEM (Dulbecco's Modification of Eagle's Medium)/Ham's F-12 50/50 Mix with<br>L-glutamine and 15 mM HEPES         | 6 | 6  |
| 25-005-CI | Corning | cellgro 100 mL L-Glutamine, 200 mM solution  | 6 | 6  |
| 25-015-CI | Corning | cellgro 100 mL glutagro,™ Liquid 200 mM Solution (with 8.5 g/L NaCl)   | 1 | 1  |
|           | -       |  |   |    |

## PRODUCT ORDERING INFORMATION (CONTINUED)

| Cat. No.   | Brand    | Description  | Qty/Pk | Qty/Cs |
|------------|----------|--|--------|--------|
| 25-025-CI  | Corning® | cellgro® 100 mL MEM Nonessential Amino Acids   | 6      | 6      |
| 25-037-CI  | Corning  | cellgro 100 mL 45% glucose solution  | 1      | 1      |
| 25-800-CR  | Corning  | cellgro 10 mL ITS (Insulin-Transferrin-Selenium)   | 1      | 1      |
| 30-002-CI  | Corning  | cellgro 100 mL Penicillin-Streptomycin Solution, 100x, 10,000 I.U. Penicillin 10,000 $\mu$ g/mL Streptomycin | 6      | 6      |
| 35-010-CV  | Corning  | cellgro 500 mL Fetal Bovine Serum, Regular   | 1      | 1      |
| 35-011-CV  | Corning  | cellgro 500 mL Fetal Bovine Serum, Regular (Heat Inactivated)  | 1      | 1      |
| 35-015-CV  | Corning  | cellgro 500 mL Fetal Bovine Serum, Premium   | 1      | 1      |
| 35-016-CV  | Corning  | cellgro 500 mL Fetal Bovine Serum, Premium (Heat Inactivated)  | 1      | 1      |
| 35-074-CV  | Corning  | cellgro 500 mL Fetal Bovine Serum, Premium (Embryonic stem cell tested)                                      | 1      | 1      |
| 40-410-KIT | Corning  | stemgro® 450 mL/50 mL hMSC Medium and Supplement   | 1      | 1      |
| 61-030-RM  | Corning  | cellgro 100 g L-Glutamine, Powder  | 1      | 1      |
| 62-450-RF  | Corning  | cellgro 1 g rhAlbumin  | 1      | 1      |
| 62-451-RF  | Corning  | cellgro 1 g rhLactoferrin  | 1      | 1      |

#### Harvest

| 20-030-CV    | Corning | cellgro 500 mL DPBS (Dulbecco's Phosphate-Buffered Saline), 10x with calcium and magnesium  | 6  | 6  |
|--------------|---------|---|----|----|
| 20-031-CV    | Corning | cellgro 500 mL DPBS (Dulbecco's Phosphate-Buffered Saline), 10x without calcium and magnesium   | 6  | 6  |
| 21-030-CV    | Corning | cellgro 500 mL DPBS (Dulbecco's Phosphate-Buffered Saline), 1x with calcium and magnesium   | 6  | 6  |
| 21-031-CM    | Corning | cellgro 1 L DPBS (Dulbecco's Phosphate-Buffered Saline), 1x without calcium and magnesium   | 6  | 6  |
| 21-031-CV    | Corning | cellgro 500 mL DPBS (Dulbecco's Phosphate-Buffered Saline), 1x without calcium and magnesium  | 6  | 6  |
| 21-031-LB    | Corning | cellgro 20 L DPBS (Dulbecco's Phosphate-Buffered Saline), 1x without calcium and magnesium  | 1  | 1  |
| 21-031-LX    | Corning | cellgro 10 L DPBS (Dulbecco's Phosphate-Buffered Saline), 1x without calcium and magnesium  | 1  | 1  |
| 21-040-CM    | Corning | cellgro 1 L PBS (Phosphate-Buffered Saline), 1x without calcium and magnesium   | 6  | 6  |
| 21-040-CMX12 | Corning | cellgro 1 L PBS (Phosphate-Buffered Saline), 1x without calcium and magnesium   | 12 | 12 |
| 21-040-CV    | Corning | cellgro 500 mL PBS (Phosphate-Buffered Saline), 1x without calcium and magnesium  | 6  | 6  |
| 25-050-CI    | Corning | cellgro 100 mL Trypsin 1x 0.25% Trypsin in HBSS without calcium and magnesium, Porcine Parvovirus tested  | 6  | 6  |
| 25-051-Cl    | Corning | cellgro 100 mL Trypsin EDTA 1x 0.05% Trypsin/0.53 mM EDTA in HBSS with sodium bicarbonate, without calcium and magnesium, Porcine Parvovirus tested | 6  | 6  |
| 25-052-Cl    | Corning | cellgro 100 mL Trypsin EDTA 1x 0.05% Trypsin/0.53 mM EDTA in HBSS without sodium bicarbonate, calcium and magnesium, Porcine Parvovirus tested      | 6  | 6  |
| 25-052-CV    | Corning | cellgro 500 mL Trypsin EDTA 1x 0.05% Trypsin/0.53 mM EDTA in HBSS without sodium bicarbonate,<br>calcium and magnesium, Porcine Parvovirus tested   | 6  | 6  |
| 25-054-Cl    | Corning | cellgro 100 mL Trypsin 10x 2.5% Trypsin in HBSS without calcium, magnesium, and phenol red,<br>Porcine Parvovirus tested                            | 6  | 6  |
| 25-056-CI    | Corning | cellgro 100 mL Cellstripper,™ Liquid  | 6  | 6  |
| 91-200-75    | Corning | 5L Trypsin Bag for HYPERStack <sup>®</sup> Vessels  | 1  | 1  |
|              |         |   |    |    |

| Cat. No.   | Brand    | Description  | Qty/Pk | Qty/Cs |
|------------|----------|--|--------|--------|
| Isolate    |          |  |        |        |
| 354357     | Corning® | SMC4, 290 μL   | 1      | 1      |
| 354277     | Corning  | Matrigel® Matrix hESC-qualified, LDEV-Free, 5 mL   | 1      | 1      |
| Store      |          |  |        |        |
| 430658     | Corning  | 1.2 mL External Threaded Polypropylene Cryogenic Vial, self-standing with conical bottom | 50     | 500    |
| 430487     | Corning  | 1.2 mL Internal Threaded Polypropylene Cryogenic Vial, self-standing with conical bottom | 50     | 500    |
| 430289     | Corning  | 2 mL External Threaded Polypropylene Cryogenic Vial with round bottom and plug seal cap  | 50     | 500    |
| 430661     | Corning  | 2 mL External Threaded Polypropylene Cryogenic Vial with round bottom                    | 50     | 500    |
| 430659     | Corning  | 2 mL External Threaded Polypropylene Cryogenic Vial, Self-Standing with round bottom     | 50     | 500    |
| 430489     | Corning  | 2 mL Internal Threaded Polypropylene Cryogenic Vial with round bottom                    | 50     | 500    |
| 430488     | Corning  | 2 mL Internal Threaded Polypropylene Cryogenic Vial, Self-Standing with round bottom     | 50     | 500    |
| 431386     | Corning  | 2 mL Internal Threaded Polypropylene Cryogenic Vial, Self-Standing with round bottom     | 50     | 250    |
| 430662     | Corning  | 4 mL External Threaded Polypropylene Cryogenic Vial, Self-Standing with round bottom     | 50     | 500    |
| 430490     | Corning  | 4 mL Internal Threaded Polypropylene Cryogenic Vial with round bottom                    | 50     | 500    |
| 430491     | Corning  | 4 mL Internal Threaded Polypropylene Cryogenic Vial, Self-Standing with round bottom     | 50     | 500    |
| 430663     | Corning  | 5 mL External Threaded Polypropylene Cryogenic Vial, Self-Standing with round bottom     | 50     | 500    |
| 430492     | Corning  | 5 mL Internal Threaded Polypropylene Cryogenic Vial with round bottom                    | 50     | 500    |
| 430656     | Corning  | 5 mL Internal Threaded Polypropylene Cryogenic Vial, Self-Standing with round bottom     | 50     | 10     |
| 431121     | Corning  | 1-2 mL Polycarbonate Cryogenic Vial Storage Box, holds 100 vials                         | 5      | 10     |
| 431119     | Corning  | 1-2 mL Polycarbonate Cryogenic Vial Storage Box, holds 81 vials                          | 5      | 10     |
| 431120     | Corning  | 4-5 mL Polycarbonate Cryogenic Vial Storage Box, holds 81 vials                          | 5      | 5      |
| 430525     | Corning  | Polycarbonate Cryogenic Vial Rack and Tray, holds 30 vials                               | 1      | 1      |
| 430526     | Corning  | Polycarbonate Cryogenic Vial Rack, holds 30 vials  | 1      | 1      |
| 431131     | Corning  | Polypropylene Cryogenic Vial Rack, holds 50 vials  | 2      | 2      |
| 25-950-CQC | Corning  | cellgro® DMSO (Dimethyl Sulfoxide), 250 mL   | 1      | 1      |
| 91-200-88  | Corning  | cellgro 20 mL Cryopreservation Storage Bag   | 1      | 1      |
| 91-200-89  | Corning  | cellgro 70 mL Cryopreservation Storage Bag   | 1      | 1      |
| 91-200-90  | Corning  | cellgro 100 mL Cryopreservation Storage Bag  | 1      | 1      |
| 91-200-91  | Corning  | cellgro 190 mL Cryopreservation Storage Bag  | 1      | 1      |
|            |          |  |        |        |

836 North St. Building 300, Suite 3401 Tewksbury, MA 01876 t 800.492.1110 t 978.442.2200 f 978.442.2476

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#### Worldwide Support Offices

ASIA/PACIFIC Australia/New Zealand

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#### Brasil t (55-11) 3089-7419 f (55-11) 3167-0700 Mexico t (52-81) 8158-8400 f (52-81) 8313-8589

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CORNING | FALCON AXYGEN

f 31 (0) 20 659 76 73 LATIN AMERICA

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