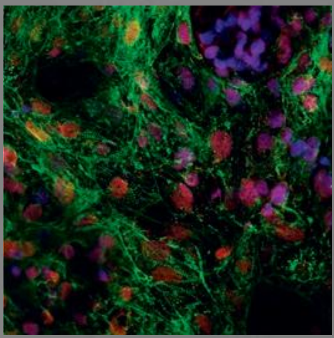
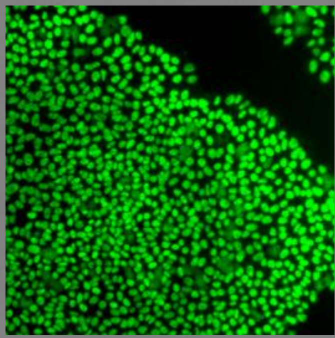
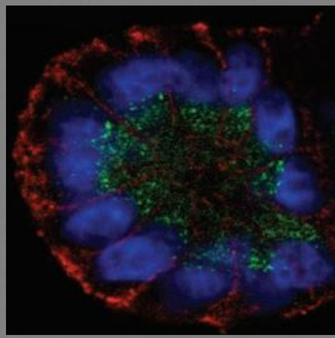


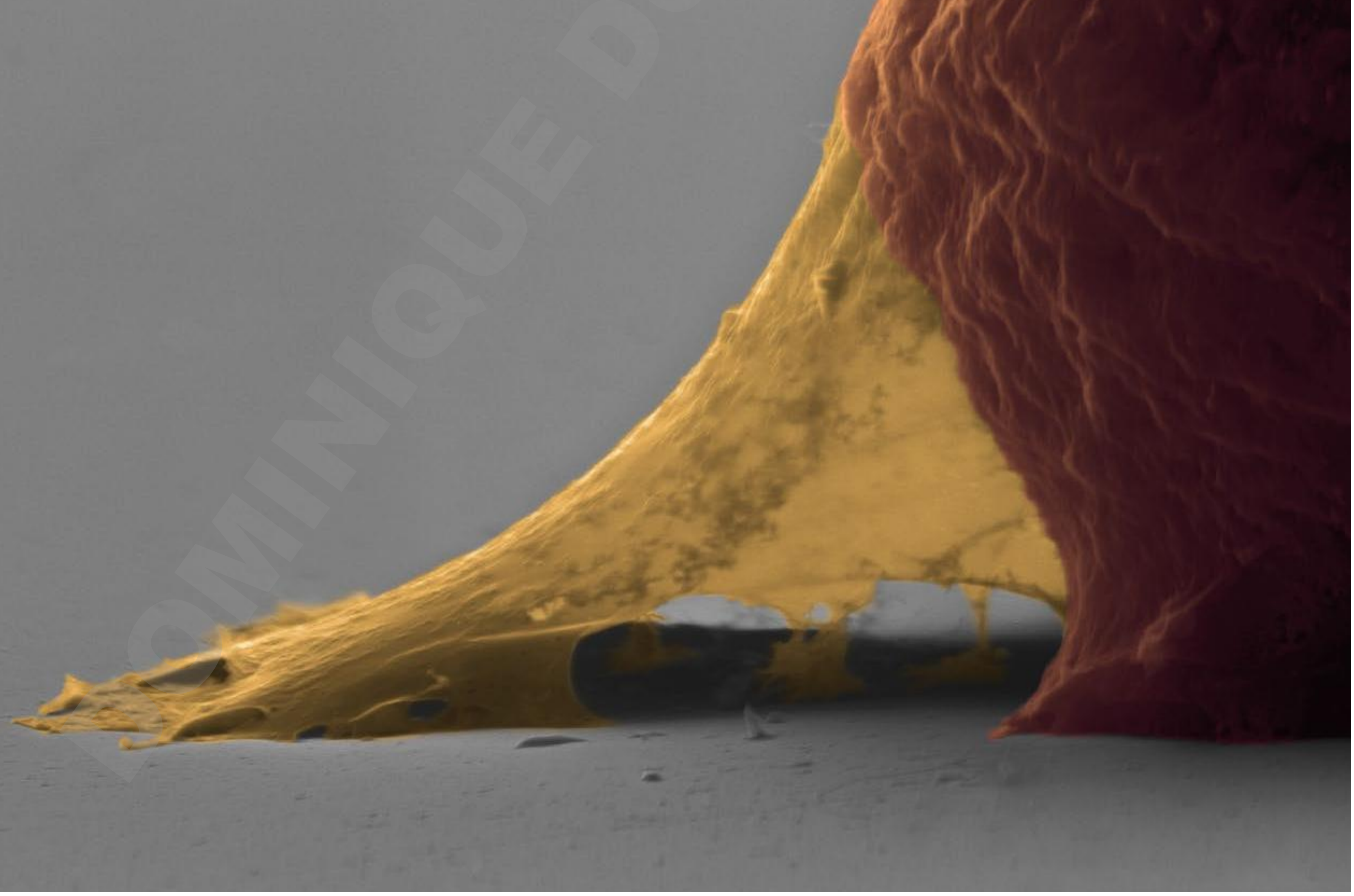




CORNING

Corning® Cell Culture Surfaces

The right surface for every cell



The Right Surface for Every Cell

Corning's history in cell culture surfaces extends back more than 100 years. During that time, we have introduced numerous new surface technologies, including PYREX® glass, Matrigel® matrix, BioCoat™ pre-coated cultureware, and synthetic ECM mimetic peptides.

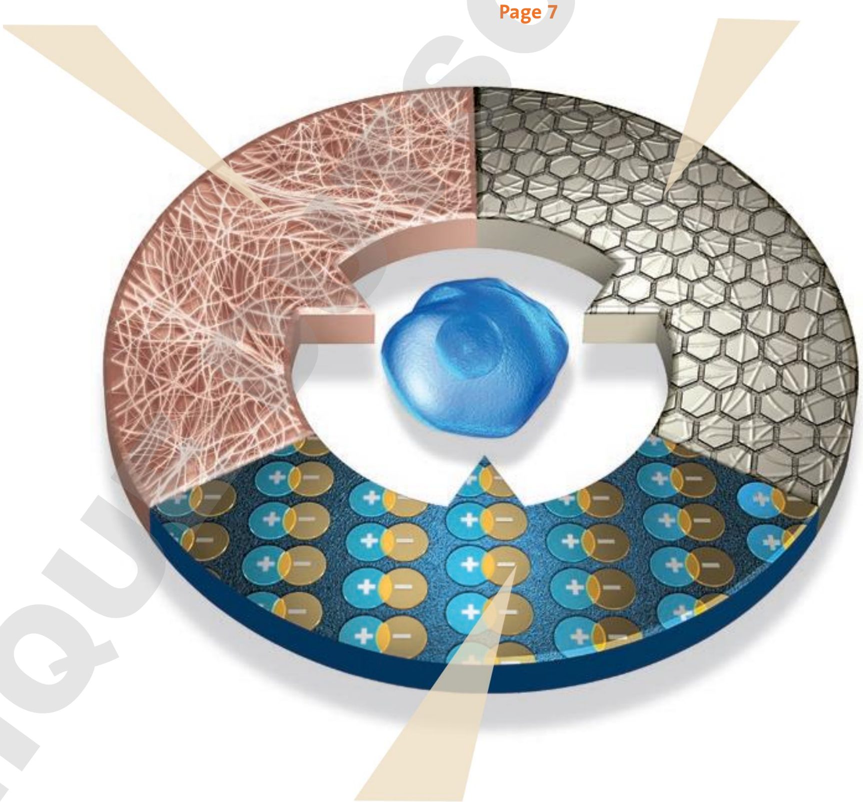
In addition to non-treated and tissue culture-treated Corning® and Falcon® polystyrene cell culture vessels, Corning offers a number of technologies for enhanced binding and growth of specialized and fastidious cell types in low- and non-serum media environments. These technologies include functional, structural, and surface charge modalities.

Extracellular Matrices and Biologically Coated Surface

Corning extracellular matrices (ECMs) enable researchers to mimic *in vivo* environments for 2D and 3D cell culture applications. Products include Corning Matrigel matrix, purified ECMs, and Corning BioCoat pre-coated cultureware.
Page 1

ECM Mimetic and Advanced Surfaces

Corning ECM Mimetic and Advanced Surfaces provide unique, functional surface activity for a range of specialized cell expansion and assay applications. Examples include Corning PureCoat ECM mimetic cultureware for defined stem and progenitor cell expansion and Corning Ultra-Low Attachment surface for 3D spheroid formation and high content screening.
Page 7



Enhanced Tissue Culture-treated Surfaces

A novel family of treatments that alter the surface charge of culture vessels. Compared to cells grown on traditional tissue culture-treated surfaces, enhanced surfaces improve the attachment and growth of fastidious cell types, such as primary or transfected cell lines in low- or serum-free environments.
Page 12

Front cover: Electron microscopy image of a muscle myoblast (primitive embryonic muscle cell) attached to a tissue culture surface by extracellular matrix.

Extracellular Matrices and Biologically Coated Surfaces

Corning provides a wide range of animal, human, and synthetic matrices to support cell attachment, propagation, differentiation, and migration. Corning's extensive experience purifying ECMs and other proteins, rigorous quality processes, and ISO 9001 manufacturing, results in high quality, consistent vialed and pre-coated products.

Corning® Matrigel® Matrix – the Original, Trusted Extracellular Matrix

Corning Matrigel matrix is a solubilized basement membrane preparation extracted from the Engelbreth-Holm-Swarm (EHS) mouse sarcoma, a tumor rich in extracellular matrix proteins, including Laminin (a major component), collagen IV, heparin sulfate proteoglycans, entactin/nidogen and a number of growth factors.

Matrigel matrix is a key reagent used in the development of angiogenesis and tumorigenesis models. It is the basis of many angiogenesis assays both *in vitro* and *in vivo*, as well as various tumor cell invasion assays. Matrigel matrix has also been used for:

- *In vivo* xenograft generation of human tumors in immunosuppressed mice
- Feeder-free expansion of both human embryonic and induced pluripotent stem cells
- Directed differentiation of neurons, hepatocytes, vascular endothelial cells, beta-islets, cardiomyocytes, and many other cell lineages.
- A scaffold for *in vivo* cell engraftment and functionality testing

Industry-Leading Manufacturing and Quality

Since Corning Matrigel matrix was first introduced more than 25 years ago, the manufacturing process has a history of protein consistency and superior product performance.

Matrigel matrix is certified lactose dehydrogenase/lactic dehydrogenase (LDEV/LDHV)-free. The manufacturing process incorporates triple-redundant testing, including both LDEV-free mouse colony testing and finished product PCR testing. Matrigel matrix is tested for 27 murine viruses and pathogens in addition to LDEV/LDHV. Corning also offers custom Matrigel matrix production for researchers that need increased levels of validation, testing, documentation, and/or process control.

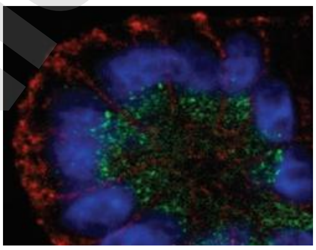
You can review the Matrigel matrix quality control specifications at **www.corning.com/matrigel**.

Lot Matching and Reservation Service

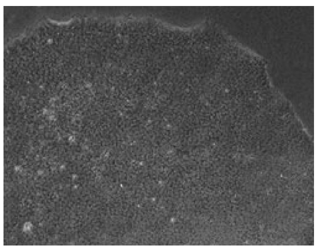
Extracellular matrices are complex biological reagents, and, like all biologically-derived reagents, they may be subject to lot-to-lot variation. Corning's stringent quality control and manufacturing practices minimize variation. In addition, researchers can use Corning's online lot matching and reserve tool to:

- Set up a lot reserve, which simplifies storage and supply chain resources
- Find a production lot with similar specifications to the previously requested lot number

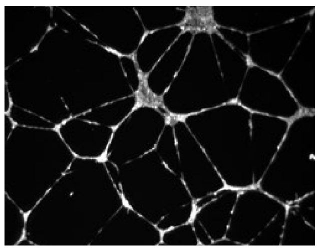
A link to the Corning Lot Matching and Reserve Tool is available at **www.corning.com/reservematrigel**.



***In vitro* 3D acinar formation on Corning Matrigel matrix.** Malignant T4-2 mammary epithelial cells were grown in a 3D culture on Matrigel matrix GFR. Immunofluorescence was used to analyze cell polarity markers for basolateral (β-catenin-red) and apical (GM130-green) membrane domains.



Feeder-free expansion of pluripotent stem cells. Phase contrast images of H9 cells grown on Corning Matrigel hESC-qualified matrix.



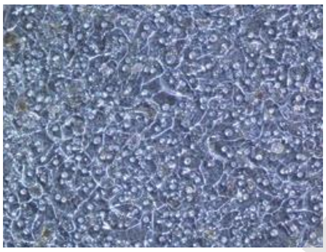
Endothelial Tube Formation. Corning HUVEC-2 cells grown on Corning Matrigel matrix demonstrating elongation, differentiation, and endothelial cell tube formation.

Corning® BioCoat™ Cultureware

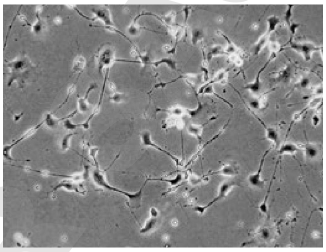
Corning has extensive experience in thin film coating technology and offers highly consistent and biologically functional pre-coated surfaces in a wide range of vessel and microplate formats.

Our stringent quality control measures and documentation are designed to meet the needs of drug discovery and biotechnology applications. Coating is conducted in a highly controlled, cGMP, aseptic manufacturing environment to ensure lot-to-lot consistency, reproducibility, and contamination control.

In addition to off-the-shelf BioCoat products, Corning's custom coating service offers a wide selection of biological and synthetic coatings for Corning and Falcon® cultureware and microplates.



Primary human hepatocytes cultured on Corning BioCoat Collagen I cultureware. Corning Gentest™ Inducible-qualified human cryohepatocytes were isolated and plated onto Corning BioCoat Collagen I 24-well plates.

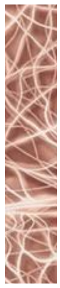


Neuronal cell attachment and dendrite formation on Corning BioCoat Laminin cultureware. NG-108 rat glioma/mouse neuroblastoma cells cultured on BioCoat Laminin cultureware exhibit a spindle-shaped morphology and dendritic processes.

Characteristics of ECMs and Biologically Coated Surfaces

Corning Matrigel® Matrix Products

	Standard Formulation	High Concentration (HC)	Growth Factor Reduced (GFR)	Phenol Red-free	hESC-qualified
Application	Suitable for culture of polarized cells, such as epithelial cells. Promotes differentiation of many cell types, including hepatocytes, neurons, beta-islets, mammary epithelial, endothelial, and smooth muscle cells.	Higher protein concentration provides greater matrix stiffness and scaffold integrity. Suitable for *in vivo* cell delivery applications for improved cell engraftment and augmentation of solid tumor formation.	Suited for applications where a more highly defined basement membrane preparation is desired. Available in standard, Phenol red-free, and GFR formulations.	Suitable for assays that require color detection (e.g., colorimetric, fluorescence). Available in standard, GFR, and HC formulations.	Pre-screened for compatibility with mTeSR®1 medium by Stem Cell Technologies, providing the reproducibility and consistency essential for human embryonic and induced pluripotent feeder-free stem cell culture.
Source	Mouse	Mouse	Mouse	Mouse	Mouse
Protein Concentration	8 - 12 mg/mL	18 - 21 mg/mL	8 - 12 mg/mL	8 - 12 mg/mL	See certificate of analysis for dilution factor which is calculated based on protein concentration.
Shelf Life	2 years from date of manufacture. Date of expiration is located on a lot-specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on a lot-specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on a lot-specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on a lot-specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on a lot-specific certificate of analysis.
Vialed Formats (Cat. No./Qty.)	356234 | 5 mL 354234 | 10 mL 356235 | 5 x 10 mL 356237 | 10 mL (Phenol red-free) 356232 I 5 x 5 mL 356254 I 10 x 10 mL	354248 | 10 mL 354262 | 10 mL (Phenol red-free) 354263 | 10 mL (GFR)	356230 | 5 mL (Standard) 354230 | 10 mL (Standard) 354263 | 10 mL (HC) 356231 | 10 mL (Phenol red-free) 356238 I 5 x 10 mL (Phenol red-free) 356239 I 10 x 10 mL (Phenol red-free) 356252 I 5x 10 mL (Standard) 356253 I 10 x 10 mL (Standard)	356237 | 10 mL (Standard) 354262 | 10 mL (HC) 356231 | 10 mL (GFR) 356238 I 5 x 10 mL (GFR) 356239 I 10 x 10 mL (GFR)	354277 | 5 mL 356277 I 5 x 5 mL 356278 I 10 x 5 mL
BioCoat™ Options	Plates: 6-well, 12-well, 24-well, 48-well, 96-well Inserts: for 24-well plates Dishes: 35 mm, 60 mm, 100 mm	N/A	N/A	N/A	N/A



Characteristics of Coated Surfaces

Corning® Extracellular Matrix Products

	Human Fibronectin, sterile filtered	Human Vitronectin, sterile filtered	Human Osteopontin	Poly-D-Lysine, sterile filtered	Corning® Cell-Tak™ Cell and Tissue Adhesive	Corning PuraMatrix® Peptide Hydrogel	Human Extracellular Matrix
Application	Suitable as a thin coating on tissue culture surfaces to promote attachment, spreading and proliferation of a variety of cell types. It can also be used as an additive to serum-free culture medium.	When used as a thin coating on tissue culture surfaces, Vitronectin is useful to promote cell attachment, spreading, proliferation, and differentiation of many normal and neoplastic cells, and to study cell migration.	RGD containing glycoprotein, used as a coating or media additive. Key research areas include bone research, integrin binding, kidney function, inflammation, chemotaxis, leukocyte recruitment, tissue remodeling, and tumorigenesis.	Suitable as a thin coating to enhance the attachment of cells to plastic and glass surfaces	Can be used for establishment of primary cultures, *in situ* hybridization, immunoassays, microinjection, immunohistochemistry, and patch clamping.	Synthetic matrix enabling researchers to develop micro-environments. Applications include primary cell differentiation, cell migration/invasion, angiogenesis assays, and *in vivo* cell engraftment for analyses of tissue regeneration.	Promotes attachment, spreading, mitosis, and differentiation of anchorage-dependent epithelial cells, particularly of human origin.
Source	Human plasma	Human plasma	Human milk	Synthetic molecule	*Mytilus edulis*	Synthetic peptide	Human placenta
Protein Concentration	Lyophilized (100 mM CAPS, 0.15M NaCl, 1 mM $CaCl_2$, pH 11.0). Reconstitute at 1 mg/mL	Lyophilized (dialyzed against 10 mM phosphate buffer pH 7.7); reconstitute in sterile distilled water or buffered solution at neutral pH	100 - 300 µg/mL, as a liquid in Dulbecco's Phosphate Buffered Saline	Lyophilized from aqueous solution. Reconstitute in sterile distilled water to preferred stock concentration.	1.5 - 2.0 mg/mL in 5% acetic acid solution	1% solution (w/v) of purified synthetic peptide, pH 3.0	0.1 - 1.5 mg/mL, frozen in 20 mM sodium phosphate buffer, pH 7.4
Shelf-life	2 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.
Vialed Formats (Cat. No./Qty.)	354008 | 1 mg 356008 | 5 mg 356009 | 25 mg (5 x 5 mg)	354238 | 250 µg	354256 | 50 µg	354210 | 20 mg	354240 | 1 mg 354241 | 5 mg 354242 | 10 mg (2 x 5 mg)	354250 | 5 mL	354237 | 1 mg
BioCoat™ Options	Plates: 6-well, 12-well, 24-well, 48-well, 96-well, 384-well. Dishes: 35 mm, 60 mm, 100 mm, 150 mm Inserts: for 6-well, 24-well, 96-well plates Coverslips: 22 mm Culture Slides: 4-well, 8-well Flasks: T-25, T-75, T-150, T-175	Custom coating options available	Custom coating options available	Plates: 6-well, 12-well, 24-well, 48-well, 96-well, 384-well Dishes: 35 mm, 60 mm, 100 mm, 150 mm Coverslips: 12 mm, 35 mm. Culture Slides: 4-well, 8-well Flasks: T-25, T-75, T-150, T-175	N/A	N/A	Custom coating options available

Characteristics of Coated Surfaces

Corning® Collagen Products

	Rat Tail Collagen I, sterile filtered	Rat Tail Collagen I High Concentration, sterile filtered	Human Collagen I	Bovine Collagen I	Bovine Collagen II, sterile filtered
Application	Suitable for a thin layer on tissue culture surfaces to enhance cell attachment and proliferation or as a gel to promote expression of cell-specific morphology and function. Commonly used to culture endothelial cells, hepatocytes, muscle cells, and a variety of other cell types.	High concentration provides greater matrix stiffness and scaffold integrity; suitable for 3D cell culture applications.	Suitable for a thin layer on tissue culture surfaces to enhance cell attachment and proliferation	Preparation contains native collagen molecules with a small amount of nicked or shortened sequences due to pepsin treatment.	Suitable for attachment and differentiation of chondrocytes. Can also be used as an *in vivo* model in rats and mice for arthritis studies
Source	Rat tail	Rat tail	Human placenta	Bovine	Bovine
Protein Concentration	3 - 4 mg/mL in 0.02 N acetic acid	8 - 11 mg/mL in 0.02 N acetic acid	2 - 4 mg/mL frozen in 2 mM Hydrochloric acid	~3 - 4 mg/mL in 0.01 N hydrochloric acid	~3 - 4 mg/mL, frozen in 15 mM acetic acid
Shelf Life	2 years from date of manufacture. Date of expiration is located on lot-specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot-specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot-specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot-specific certificate of analysis.	1 year from date of manufacture. Date of expiration is located on lot-specific certificate of analysis.
Vialed Formats (Cat. No./Qty.)	354236 | 100 mg 356236 | 1 g (10 x 100 mg)	354249 | 100 mg	354243 | 0.25 mg 354265 | 10.0 mg	354231 | 30 mg	354257 | 5 mg
BioCoat™ Options	Plates: 6-well, 12-well, 24-well, 48-well, 96-well, 384-well Dishes: 35 mm, 60 mm, 100 mm, 150 mm Flasks: T-25, T-75, T-150, T-175 (vented cap) Cover slip: 22 mm, round Culture slides: 4-well and 8-well Custom coating options available	Custom coating options available	Custom coating options available	Custom coating options available	Custom coating options available

Corning® Collagen Products (continued)

	Human Collagen III	Human Collagen IV	Mouse Collagen IV	Human Collagen V	Human Collagen VI	Corning BioCoat™ Gelatin
Application	Found in several connective tissues including the dermis of young organisms, human skin, and cornea. It can be used as a thin coating on tissue culture surfaces to promote cell attachment and to modulate cell behavior.	A ubiquitous component of the basement membrane. The sheet-like matrix is found in close proximity to epithelial, muscle, and nerve cells. Plays a role in the regulation of cell growth, differentiation, and tissue formation.	A ubiquitous component of the basement membrane. The sheet-like matrix is found in close proximity to epithelial, muscle and nerve cells. Plays a role in the regulation of cell growth, differentiation, and tissue formation.	Found in whole placenta, amnion, chorion, and cornea. Suitable as a thin coating on tissue culture surfaces to study Collagen V effects on cell behavior.	A large, multi-domain ECM. Its heterotrimeric chains assemble into microfibrillar networks via tetramerization and end-to-end association. Generally used as a coating but may also be added to cell culture media.	Gelatin substrate enhances the attachment of a variety of normal and transfected cell types.
Source	Human placenta	Human placenta	Engelbreth-Holm-Swarm lathrytic mouse tumor	Human placenta	Human placenta	Porcine
Protein Concentration	0.9 - 1.1 mg/mL in 10 mM Acetic acid	0.5 - 1 mg/mL, frozen in 10 mM Acetic acid	0.2 - 1 mg/mL, frozen in 0.05 M Hydrochloric acid	0.8 - 1 mg/mL, frozen in 10 mM Acetic acid	0.3 - 0.5 mg/mL frozen in 1 M Sodium Chloride, 1.25 mM Tris, pH 8.0	Coating concentration (900 - 1100 µg/mL)
Shelf Life	2 years from date of manufacture. Date of expiration is located on lot-specific certificate of analysis.	2.5 years from date of manufacture. Date of expiration is located on lot-specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot-specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot-specific certificate of analysis.	1.5 years from date of manufacture. Date of expiration is located on lot-specific certificate of analysis.	4.5 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.
Vialed Formats (Cat. No./Qty.)	354244 | 0.25 mg	354245 | 0.25 mg	354233 | 1 mg 356233 | 10.0 mg (10 x 1 mg)	354246 | 0.25 mg	354261 | 0.5 mg	N/A
BioCoat Options	Custom coating options available	Custom coating options available	Plates: 6-well, 24-well, 96-well Dishes: 35 mm, 60 mm, 100 mm Flasks: T-25, T-75, T-175 Culture Slides: 4-well and 8-well Inserts: for 6-well and 24-well plates Custom coating options available	Custom coating options available	Custom coating options available	Plates: 6-well, 96-well Dishes: 100 mm Flasks: T-75 Custom coating options available

Corning® Laminin Products

	Mouse Laminin, sterile filtered	Laminin/Entactin Complex (High Concentration), sterile filtered	Ultrapure Laminin (entactin-free), sterile filtered	Poly-D-Lysine/ Laminin	Poly-L-Ornithine/ Laminin	Laminin/Fibronectin
Application	Suitable as a thin coating on tissue culture surfaces or as a soluble additive to culture medium. It has been shown in culture to stimulate neurite outgrowth, promote cell attachment, chemotaxis and cell differentiation.	A highly consistent ECM formulation that enables the study of 3D cell differentiation and functionality, and can be used as a consistent substitute for Corning Matrigel Matrix. Applications include endothelial cell tubulogenesis, and feeder-free culture of hESC and iPSC.	A highly pure preparation of mouse laminin that is devoid of the bridging entactin molecule. Ultrapure Laminin has the same functionality as standard Laminin but is suited for applications where entactin is not desired.	Corning® BioCoat™ PDL/Laminin enhances the attachment, propagation and differentiation of neuronal cell on plastic and glass surfaces.	BioCoat PLO/ Laminin enhances the attachment, propagation and differentiation of neuronal cell on plastic and glass surfaces	BioCoat Laminin/ Fibronectin blend enhances the attachment, propagation, and differentiation of neuronal cell on plastic and glass surfaces
Source	Engelbreth-Holm-Swarm mouse tumor	Engelbreth-Holm-Swarm mouse tumor	Engelbreth-Holm-Swarm mouse tumor	Poly-D-Lysine: Synthetic molecule Laminin: Engelbreth-Holm-Swarm (EHS) mouse tumor	Poly-L-Ornithine: Synthetic molecule Laminin: Engelbreth-Holm-Swarm (EHS) mouse tumor	Laminin: Engelbreth-Holm-Swarm (EHS) mouse tumor Fibronectin: Human plasma
Protein Concentration	0.6 - 2.0 mg/mL, frozen in 0.05 M Tris-HCl, 0.15 M NaCl, pH 7.4	11 - 17 mg/mL , frozen in 0.05 M Tris-HCl, 0.15 M NaCl, pH 7.4	0.6 - 2.0 mg/mL, frozen in 0.05 M Tris-HCl, 0.15 M NaCl, pH 7.4	N/A	N/A	N/A
Shelf-life	2 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.	1 year from date of manufacture. Date of expiration is located on lot specific certificate of analysis.	1.5 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.	2 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.	1.5 years from date of manufacture. Date of expiration is located on lot specific certificate of analysis.
Vialed Formats (Cat. No./Qty.)	354232 | 1 mg	354259 | 10.5 mg	354239 | 1 mg	N/A	N/A	N/A
BioCoat™ Options	Plates: 6-well, 12-well, 24-well, 48-well, 96-well Dishes: 35 mm, 60 mm, 100 mm, 150 mm Flasks: T-25, T-75 (plug seal cap) Custom coating options available	Custom coating options available	Custom coating options available	Plates: 6-well, 24-well, 96-well clear Culture dish: 100 mm Cover slip: 12 mm round Culture Slide: 8-well Custom coating options available	Plates: 6-well, 24-well, 96-well clear Custom coating options available	Multiwell plate: 96-well clear Custom coating options available

Corning® PureCoat™ and Advanced Surfaces

Corning is a leader in cell culture surface technology, with a long legacy of developing new surfaces with expanded capabilities. These surfaces enable cell biologists to develop new applications, such as defined expansion and differentiation of stem and progenitor cell types and tools for 3D spheroid generation and screening.

Corning PureCoat ECM and Defined Surfaces

Corning PureCoat ECM and advanced surfaces contain biologically active, animal-free peptides that have been rationally designed to mimic the cell attachment process and motifs of native ECM proteins. The peptides enable optimal cell binding and signaling in a broad range of serum-free, xeno-free, and animal-free media formulations, supporting the propagation and differentiation of a range of stem, progenitor, and primary cell types.

cGMP-compliant Manufacturing and Animal-free Traceability

Corning PureCoat surfaces are class I medical devices, manufactured in animal-free, cGMP compliant facilities that meet ISO 9001:2008 and ISO 13485 standards using animal-free components.The animal-free nature of the surfaces mitigates variability and risk of contamination from adventitious organisms common to animal-sourced material.

Scalable, Pre-coated Vessel Platforms

Corning PureCoat surfaces streamline the cell expansion workflow by removing the need for tedious, time consuming, and inconsistent self-coating protocols. Pre-coated Fibronectin, Collagen I or rLaminin-521 cultureware offer simple and efficient scale-up, available on multi-layered vessels, such as the Falcon® Multi-Flask and Corning CellSTACK® vessels with closed system options.

Each Corning ECM mimetic vessel and surface configuration has been validated to ensure predictable cell culture performance during scale-up.

Corning PureCoat™ ECM Mimetic Cultureware

Corning PureCoat cultureware is coated with biologically active, synthetic, animal-free peptides that are covalently linked to a proprietary surface to provide a highly consistent, cost-effective alternative to self-coated extracellular peptides. The proprietary covalent linkage orients the peptides for optimal binding and signaling.

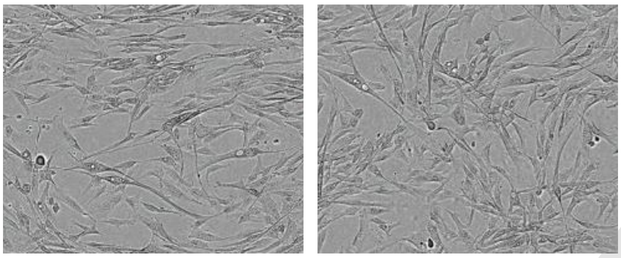
There are two PureCoat ECM Mimetic types:

- **Corning PureCoat ECM mimetic Fibronectin Peptide** contains the RGD sequence motif and supports the attachment of cell types that require Fibronectin binding, including alpha-5 integrin-positive cells. It is a drop-in, compatible, animal-free alternative to natural animal or human ECM surfaces, such as natural human Fibronectin, for hMSC expansion and differentiation.
- **Corning PureCoat ECM mimetic Collagen I Peptide** supports the attachment of Collagen I-dependent cell types including alpha 2 integrin-positive cells. It is a compatible, animal-free alternative to natural animal or human ECM surfaces, such as natural animal-derived Collagen I for human keratinocyte expansion.

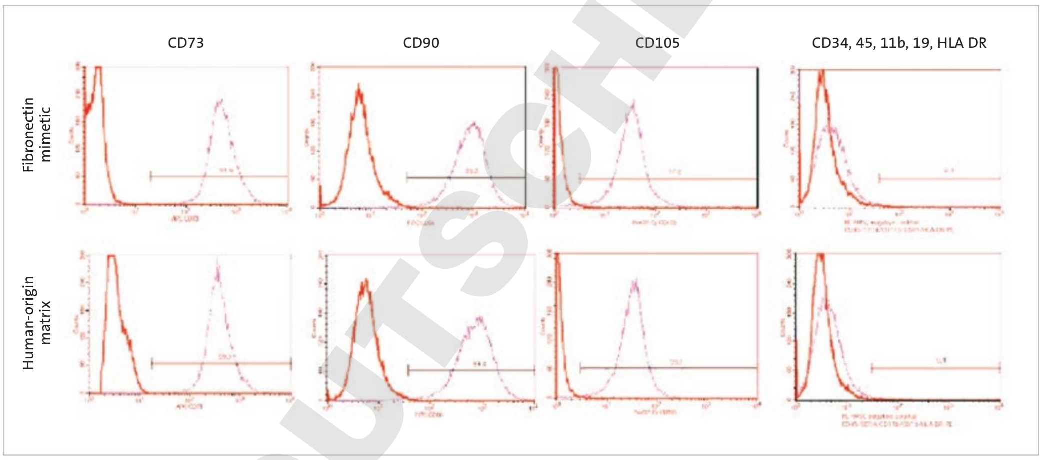
Corning PureCoat ECM Mimetic Fibronectin Peptide

Defined, Xeno-free MSC Kit with Human Origin Coating Matrix

After Passage 5, 10X Objective



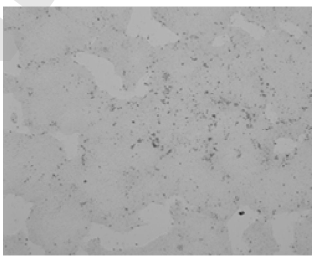
Comparable cell growth, morphology. Bone marrow-derived hMSCs cultured in a defined and xeno-free media on the Corning® PureCoat™ ECM mimetic Fibronectin peptide surface exhibit a tight and compact morphology and are comparable to the human origin matrix coating after 5 passages.



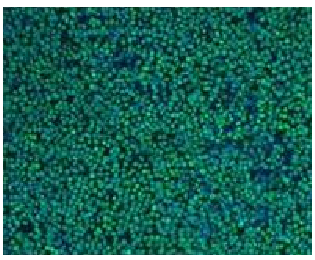
hMSCs cultured on Corning PureCoat ECM mimetic fibronectin peptide displayed a cell surface marker profile characteristic of hMSCs. Data shows expression of CD73, CD90, CD105, and the absence of CD34, CD45, CD11b, CD19, and HLA-DR. Results were comparable to human ECM coating matrix.

Corning rLaminin-521 (Human)

Corning has partnered with BioLamina for the supply of recombinant human laminin-521. Corning rLaminin-521 (Human) is a heterotrimer composed of $\alpha 5$, $\beta 2$, and $\gamma 1$ chains expressed in a mammalian cell culture system. rLaminin-521 (Human) supports long-term self-renewal of human pluripotent stem cells (hPSC), including embryonic stem cells (hESC) and induced pluripotent stem cells (iPSC) in defined and xeno-free environments. rLaminin-521 provides additional benefits, including ROCK inhibitor independent single cell expansion of PSCs and inhibition of spontaneous differentiation, improving hPSC culture ease and efficiency.



hESC cultured on Corning rLaminin-521 (Human) in xeno-free medium exhibit characteristic colony morphology with a high nuclear-to-cytoplasm ratio.



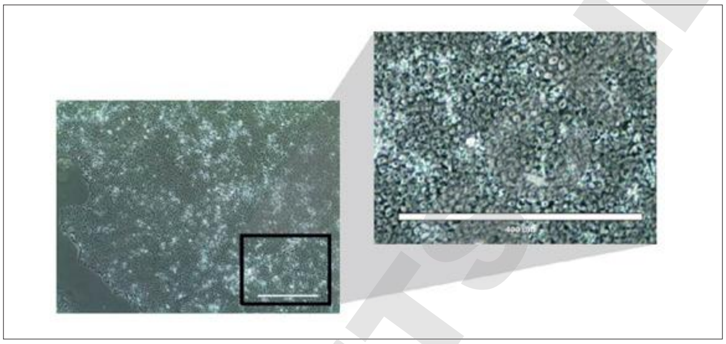
Immunocytochemistry data showing Oct-4 (green) expression in the cells. Nuclei were stained with DAPI (blue).

Corning® PureCoat™ rLaminin-521 Cultureware

The recombinant Laminin-521 cultureware combines BioLamina's expertise in recombinant Laminin expression with Corning's extensive line of vessels and proprietary surface coating technologies. This agreement brings robust, scalable, animal free, pre-coated cultureware solutions to the emerging stem cell processing market, enabling clinical researchers to scale-up effectively and mitigate risk.

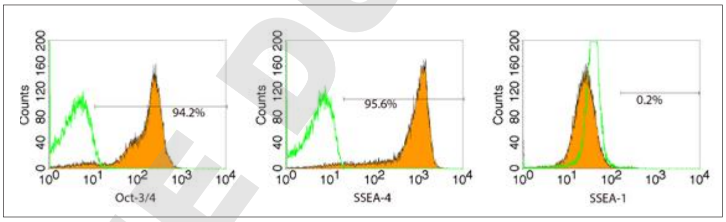
- Maintains hPSC pluripotency for a minimum of 10 passages with a high expansion rate
- Highly consistent and controlled monolayer cell growth
- Proven performance with multiple hPSC lines and media

Morphology



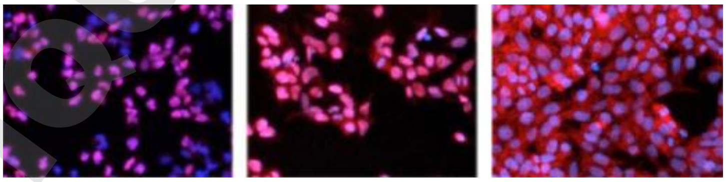
Representative images of hiPSCs cultured on Corning PureCoat rLaminin-521 cultureware from day 5. Inset shows typical undifferentiated hiPSCs morphology with prominent nuclei, small cell size, and high nucleus to cytoplasm ratio. Scale bar = 400 µm.

Undifferentiated Marker Expression



Histograms from flow cytometry showing the expression of OCT3/4, SSEA-4, and SSEA-1 after 10 passages on Corning PureCoat rLaminin-521 cultureware.

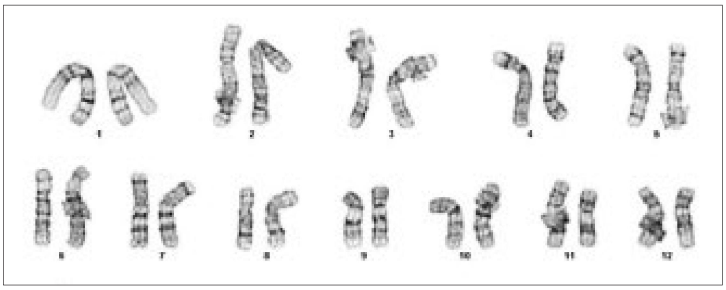
Differentiation



Endoderm (SOX17) | **Ectoderm** (Otx2) | **Mesoderm** (Brachyury)

Representative fluorescent micrographs of hiPSCs differentiated into three germ layers and immunostained with corresponding antibodies: endoderm (SOX17), ectoderm (Otx2), and mesoderm (brachyury). Cell nuclei were labeled using Hoechst 33342 (blue).

Karyotyping

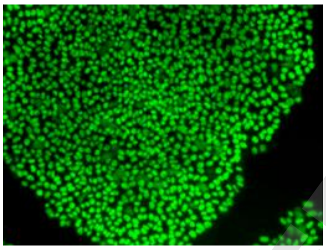


The cells exhibited a normal karyotype after 10 passages, and genetic abnormalities were not detected.

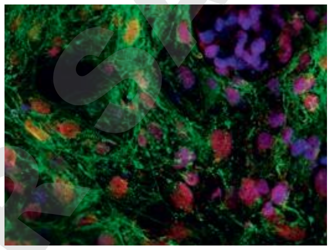
Corning® Synthemax® Surface

Corning Synthemax self-coating substrate is a unique, animal-free, synthetic Vitronectin-based peptide containing the RGD motif and flanking sequences. The synthetic peptides can be covalently bound to a polymer backbone for passive coating, orienting, and presenting the peptide for optimal cell binding and signaling.

The Synthemax substrate allows for scalable, multi-passage expansion of pluripotent stem cells in serum-free media, such as mTeSR®, subsequent to differentiation into a number of cell types, including retinal pigment epithelial cells and cardiomyocytes, as well as propagation of various progenitor cell types. For added convenience, the Synthemax surface is also available on pre-coated vessels on a custom basis.



Oct-4 staining of hiPSC after 5 passages on Corning Synthemax II-SC Substrate in mTeSR1 medium.



Differentiation of H7 hESCs into cardiomyocytes on Corning Synthemax Surface. Confocal fluorescent image of beating structures immunostained for cardiomyocyte-specific markers: Nkx2.5 (red), α-actinin (green).

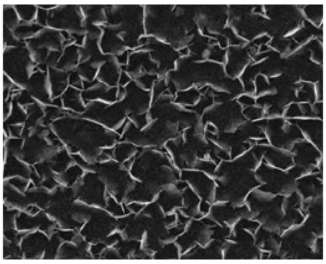
ECM Mimetic and Defined Surfaces Products

	Corning PureCoat™ ECM Mimetic Fibronectin Peptide	Corning PureCoat ECM Mimetic Collagen I Peptide	Corning Synthemax Vitronectin Peptide	Corning rLaminin-521 (Human)
Application	Ready-to-use cultureware suitable as a replacement for natural, self-coated Fibronectin for adult stem, progenitor, and primary cell types in defined media environments	Ready-to-use cultureware suitable as a replacement for natural, self-coated Collagen I for adult stem, progenitor, and primary cell types in defined media environments	A flexible coating substrate for the culture of hPS, adult, and progenitor cell types in defined media environments	A robust, animal component-free substitute enabling ROCK-independent, single cell passaging of pluripotent stem cells in defined media environments
Surface Technology	Covalently bound, synthetic peptide containing the RGD sequence and flanking Fibronectin sequences	Covalently bound, synthetic peptide containing the GFOGOR sequence and flanking Collagen I sequences	Passively self-coated, synthetic peptide acrylate polymer containing the RGD sequence and flanking Vitronectin sequences	Passive coating, full length recombinant Laminin protein
Cell Types and Environment	• Human mesenchymal stem cells (SF, XF, AF)* • Human adipose-derived stem cells (XF) • Human lung stromal cells (XF) • Human endothelial progenitors (XF) • Retinal pigment epithelial cells (XF)	• Human keratinocytes (XF, AF) • Human corneal cells (SF) • Human adipose-derived stem cells (XF) • Human endothelial progenitor cells (XF)	• Retinal pigment epithelial cells (XF) • Human pluripotent stem cells (SF) • Human neural progenitor cells (SF) • Human mesenchymal stem cells (SF, XF)	• Human pluripotent stem cells (SF, XF, AF) • Human neural progenitor cells (SF)
Shelf-life	18 months at room temperature	18 months at room temperature	24 months for self-coat peptide when stored at -20°C	Vialed product: 24 months when stored at -20°C. Pre-coated cultureware: minimum of 20 months when stored at 2°C to 8°C.
Formats (Cat. No./ Description/ Qty.)	356240 | 6-well plate 356241 | 24-well plate 356242 | T-75 flask 356243 | T-175 flask	356270 | 6-well plate 356271 | 24-well plate 356272 | T-75 flask 356273 | T-175 flask	3535 | 10 mg (self-coat peptide)	354220 | 20 µg 354221 | 100 µg 354222 | 1 mg 354223 | 5 mg
Pre-coated Options	Plates: 6-well and 24-well Flasks: T-75, T-175 Multi-layer Flasks: 3- and 5-layer Corning CellSTACK®: 2-, 5-, and 10-layer (contact for availability)	Plates: 6-well and 24-well Flasks: T-75, T-175 Multi-layer Flasks: 3- and 5-layer	Pre-coated on microcarriers Custom pre-coated vessels available	Plates: 6-well Flasks: T-75, T-175 Multi-layer flasks: 3- and 5-layer Corning CellSTACK: 2-,5-, and 10-layer (contact for availability)

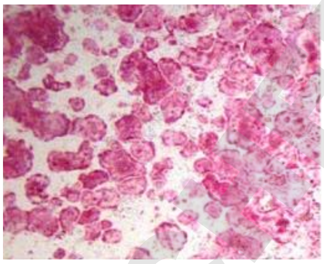
*SF = serum-free media, XF = xeno-free media, AF = animal-free media.

Corning® Osteo Assay Surface

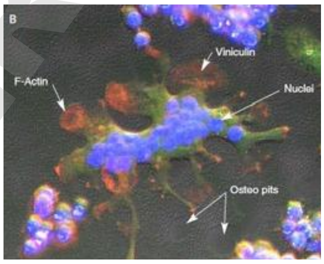
Corning Osteo assay surface is a ready-to-use synthetic surface made of an inorganic crystalline calcium phosphate coating that mimics native bone. The Osteo assay surface can be used for bone cell differentiation and functional analysis. This surface also offers a consistent and defined alternative to preparing dentine or bone slices, thereby reducing assay variability and resulting in more predictable assay readouts.



Scanning electron micrograph of the Corning Osteo assay calcium phosphate crystalline surface.



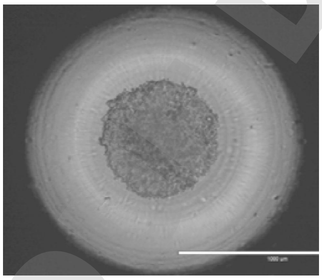
TRAP staining of differentiated human osteoclast precursor cells on the Corning Osteo assay surface.



Differentiated osteoclasts derived from AW264.7 cells on Corning Osteo assay surface showing pit formation

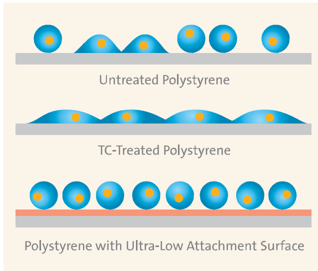
Corning Ultra-Low Attachment Surface

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 immobilization, which forces cells into a suspended state that enables 3D spheroid formation. The coating is stable, noncytotoxic, biologically inert, and non-degradable. The Ultra-Low Attachment surface is available in plates, dishes, flasks, and Corning CellSTACK® vessels, as well as 96-well and 384-well plates for high throughput spheroid screening applications.



Multicellular spheroid formation after a 24-hour culture of HT-29 cells in 384-well Spheroid microplate.

96-well and 384-well round bottom Ultra-Low Attachment microplates enable high-throughput fluorescent spheroid assay screening. The unique microplate underside design shields well-to-well cross-talk.



Schematic demonstrating Ultra-Low Attachment function

Other Advanced Surfaces Products

	Osteo Assay Surface	Ultra-Low Attachment
Application	Enables the direct assessment of osteoclast and osteoblast functionality, including bone remodeling and pit formation	Enables 3D spheroid formation, such as embryoid body and tumorsphere formation.
Surface Technology	Calcium Phosphate micro-crystalline scaffold	Covalently bound hydrophilic, non-ionic, neutrally charged hydrogel
Formats	Plates: 24-well, 96-well, Corning Stripwell™ microplate	Plates: 6-well, 24-well, 96-well flat (clear), 96-well round bottom (black/clear), 384-well flat bottom (black/clear), 384-well round bottom (black/clear). Dishes: 60 mm, 100 mm Flasks: T-25, T-75, Corning CellSTACK: 1-layer

Enhanced Tissue Culture-treated Surfaces

Corning Enhanced Tissue Culture (TC)-treated surfaces are a family of treatments that alter the surface charge of culture vessels, improving the attachment and growth of fastidious cell types, such as primary or transfected cell lines in low or serum-free environments. Enhanced surfaces are suitable for research, drug discovery, and high throughput screening applications.

Corning® PureCoat™ Amine and Carboxyl Surfaces

Corning PureCoat amine (positively charged) and carboxyl (negatively charged) surfaces provide improved cell attachment, faster cell proliferation, and enhanced recovery post-thaw over standard TC surfaces. These surfaces function with a broad range of primary, transfected, transformed, and fastidious cell types, and have demonstrated utility in serum-reduced or serum-free conditions.

Corning Primaria™ Surface

The Corning Primaria surface features a unique mixture of oxygen-containing (negatively charged) and nitrogen-containing (positively charged) functional groups on the polystyrene surface. The surface supports the growth of cells that can exhibit poor attachment or limited differentiation potential when cultured on traditional TC surfaces, including neuronal, primary, endothelial, and tumor cells. The surface consistency of each lot is confirmed by electron spectroscopy chemical analysis (ESCA).

Corning CellBIND® Surface

The Corning CellBIND surface features a net negative surface charge due to oxygen-containing functional groups incorporated in the polystyrene surface. The surface is more hydrophilic, and thus more wettable, compared to standard TC surfaces, which facilitates cell attachment and spreading.

Enhanced Surfaces Products

	Corning PureCoat Amine	Corning PureCoat Carboxyl	Corning Primaria	Corning CellBIND Surface
Surface Technology/ Charge	Vacuum-gas plasma amine group polymerization treatment. Positive charge	Vacuum-gas plasma carboxyl group polymerization treatment. Negative charge	Vacuum-gas plasma treatment. Positive/ negative and nitrogen functional groups	Corona-gas treatment. Negative net charge
Formats	Falcon® vessels Plates: 6-well, 24-well, 96-well, 384-well, 1536-well Dishes: 100 mm Flasks: T-75, T-175	Falcon vessels Plates: 6-well, 24-well Dishes: 100 mm Flasks: T-75, T-175	Falcon vessels Plates: 6-well, 24-well, 96-well Dishes: 10 mm, 15 mm, 20 mm Flasks: T-25, T-75	Corning vessels Plates: 6-well, 12-well, 24-well, 48-well, 96-well, 384-well, 1536-well Dishes: 35 mm, 60 mm, 100 mm Flasks: T-75, T-150, T-175, T-225, Corning HYPER*Flask*®, Corning CellSTACK®, Corning HYPER*Stack*®, Corning CellCUBE®, Corning Microcarriers

Corning Surface Selection by Cell Type

Primary Cells

Primary Cells	Cell-Tak™	Collagen I	Collagen IV	Matrigel® Matrix	Fibronectin	Gelatin	Laminin	Osteopontin	Poly-Lysine (PDL, PLL)	PDL/LM and PLO/LM	PuraMatrix®	Vitronectin	PureCoat™ ECM Mimetic Fn	PureCoat ECM Mimetic COL I	Synthemax® Surface	Ultra-Low Attachment	Osteo Assay Surface	rLaminin-521 (Human)	Primaria™	CellBIND® Surface	PureCoat Amine	PureCoat Carboxyl
	Extracellular Matrices (ECMs) and Biological Coatings												ECM Mimetics and Advanced Surfaces						Enhanced TC-treated Surfaces			
Aortic endothelial cells, BAEC		■		■	■		■					■										
Bile duct cells (epithelial)		■		■																		
Bone marrow cells (bone resorption, osteoclast)																	■					
Brain microvessel (endothelial)		■	■	■	■	■	■					■										
Cardiomyocytes; cardiac (endothelium, progenitor cells)		■		■	■		■		■		■								■			■
Colonocytes (epithelial)			■	■												■						
Dorsal root ganglia				■					■	■												
Embryonic cortical neurons				■						■												
Embryonic sympathetic neurons			■	■			■			■												
Endothelial cells; endothelial colony forming cells			■		■		■						■	■					■			
Erythrocyte culture (parasite development stages [asexual, sexual])	■			■																		
Hepatocytes		■	■	■			■		■		■								■	■		
Hippocampal neurons				■	■		■		■	■	■											
Human periodontium (periodontal ligament)	■																					
Human osteoclast precursors (osteoclast, pit formation)																	■					
HUVEC (endothelial)		■		■	■	■	■	■			■	■							■			
HVSMC				■			■					■										
Keratinocytes		■		■	■						■	■		■		■						
Mammary epithelial cells; breast cells (luminal, myoepithelial and endothelial)		■		■			■				■					■						
Microvascular, BME (endothelial)		■	■	■	■	■					■	■										
Mouse splenic T-cells	■		■	■																		
Muscle cells, myoblasts, myogenic cells, myotubes				■			■													■		
Neuronal cells (cortical, cerebellar granule, astrocytes, sensory, sympathetic)			■				■		■	■											■	
Oligodendrocytes (glial; precursors)				■			■		■			■										
Osteoblasts		■									■	■										
Pancreatic islet, neonatal (3- to 5-day-old) rat islets of langerhans	■			■	■											■					■	
Parotid acinar cells	■			■																		
Peripheral blood mononuclear cells		■	■	■	■							■				■	■					
Postnatal mouse vestibular ganglion neurons	■																					
Schwann cells (glial)			■	■			■				■											
Sertoli cells (spermogenic)	■			■																		
Skeletal muscle cells (myocytes, myotubes)				■															■	■		
Smooth muscle cells (endothelial, aortic, vascular)	■	■	■	■	■														■			
Urothelial cells		■	■	■	■																	
Valvular interstitial cells					■																	
Zygote and blastocyst development stages	■																					

Cell Lines (transformed or transfected)

Cell Lines	Extracellular Matrices (ECMs) and Biological Coatings												ECM Mimetics and Advanced Surfaces						Enhanced TC-treated Surfaces			
	Cell-Tak™	Collagen I	Collagen IV	Matrigel® Matrix	Fibronectin	Gelatin	Laminin	Osteopontin	Poly-Lysine (PDL, PLL)	PDL/LM and PLO/LM	PuraMatrix®	Vitronectin	PureCoat™ ECM Mimetic Fn	PureCoat ECM Mimetic COL I	Synthemax® Surface	Ultra-Low Attachment	Osteo Assay Surface	rLaminin-521 (Human)	Primaria™	CellBIND® Surface	PureCoat Amine	PureCoat Carboxyl
ARH-77 (lymphoblast)					■																	
BHK-21 (fibroblast)					■	■						■							■		■	
Breast cancer cells (established cell lines)	■			■					■													
C2C12 (myoblast)		■		■								■				■						
Cell immobilization (Gin-1, Nasal epithelial cells, Molt-4 and K562 human leukemia cells, Sf9 Cells)	■																					
Chinook Salmon Embryo Cells (CHSE-214)																				■		
CHO, CHO-1, CHO-K1 (epithelial, endothelial, transfected fusion protein)				■					■		■		■						■	■	■	
COS-7 (fibroblast, transfected)		■		■	■				■			■							■			
Dorsal Root Ganglia (transfected)				■								■										
H1299 (transfected-human non-small cell lung carcinoma cell line)				■	■																	
HEK-293 (transfected, epithelial), EcoPack2™-293, HEK-SRAtet cells, Living Colors HEK-ZsGreen proteasome sensor (transfected)	■	■		■		■			■		■					■			■	■	■	■
HeLa											■											■
HepG2 (hepatocyte), Hep3B (hepatoma)		■		■							■	■				■				■	■	■
HT-1080 (epithelial)		■	■	■												■						■
hFOB 1.19, MG63 (osteoblast cell lines)				■	■			■			■	■				■						
Human MOLT-4, drosophila S2 (biomaterial and tissue engineering applications)	■																					
Keratinocytes (human neonatal)		■			■									■								
L929 (fibroblast, transfected)				■				■			■											
LnCAP (prostate cancer cell line)		■		■												■				■		■
MCF7 (epithelial)		■	■		■							■				■						
MCF-10A (epithelial)		■		■	■		■			■	■	■				■						
MDA-MB-231		■	■	■	■	■	■		■			■				■						
MDA-MB 435		■		■								■										
MM41 (skeletal myoblasts, transfected)		■																				
MRC5																						■
N2AB-1 (neuroblastoma)	■																					
NIH/3T3, 3T3 (fibroblast)				■	■				■		■											
PC-3, PC-12		■		■			■		■	■	■								■	■	■	■
RTG-2 (rainbow trout gonad cells)				■																■		
RAW 264.7 (macrophage; osteoclast differentiation, pit formation)			■				■										■					
SH-SY5Y		■	■	■			■			■	■	■										
SK-MEL-28			■		■		■					■										
U266 (lymphoblast)					■																	
U937 (monocyte)		■					■					■				■						
Vero cells													■	■								

Stem and Progenitor Cell Expansion

Stem and Progenitor Cells	Extracellular Matrices (ECMs) and Biological Coatings												ECM Mimetics and Advanced Surfaces						Enhanced TC-treated Surfaces			
	Cell-Tak™	Collagen I	Collagen IV	Matrigel® Matrix	Fibronectin	Gelatin	Laminin	Osteopontin	Poly-Lysine (PDL, PLL)	PDL/LM and PLO/LM	PuraMatrix®	Vitronectin	PureCoat™ ECM Mimetic Fn	PureCoat ECM Mimetic COL I	Synthemax® Surface	Ultra-Low Attachment	Osteo Assay Surface	rLaminin-521 (Human)	Primaria™	CellBIND® Surface	PureCoat Amine	PureCoat Carboxyl
Human embryonic stem cell (hESC)			■	■	■		■					■			■	■		■		■		
Human induced pluripotent stem cell (hiPSC)				■											■			■				
hMSCs (bone marrow derived, adipose derived)					■			■				■	■		■					■		
Human retinal progenitor cells (RPE)					■										■							
rESC; rat endothelial progenitor cells						■						■				■						
Neuronal stem cell (intestinal/enteric)					■		■									■						

In Vitro Differentiation of Pluripotent Stem Cells

Stem Cells	Extracellular Matrices (ECMs) and Biological Coatings												ECM Mimetics and Advanced Surfaces						Enhanced TC-treated Surfaces			
hESC (cerebral organoid model)				■																		
hESC (pancreatic)				■		■																
hESC, hiPSC (cardiomyocytes)				■		■									■			■				
hESC, hiPSC, mESC (Germ Cell Layers: ectoderm, mesoderm, endoderm; hematopoietic progenitor; definitive differentiation; cardiomyocytes)		■	■	■	■	■	■					■			■	■		■				
hESC, hiPSC, mESC, miPSC (endothelial)	■	■		■			■															
hESC, hiPSC (intestinal organoids)				■												■						
hESC, hiPSC (neuronal)				■	■		■		■	■	■	■				■		■				
hESC (osteogenic)						■																
hESC, hiPSC (smooth muscle)				■	■		■		■			■										
hESC, mESC (lung epithelial)		■		■		■										■						
hESC, mESC, rESC (hepatocyte, hepatocyte-like)		■		■	■	■	■		■			■				■						
Human NPCs (differentiation to neuronal cells)				■			■				■							■				
hPSCs, mPSCs (renal progenitor cells, renal tubular cells, endoderm)		■		■												■						
mESC (hematopoietic)	■			■			■															
mESC, Chicken (cardiomyocytes)		■		■	■	■	■															
mESC, rESC, miPSC (neuronal, progenitor)				■	■	■	■		■		■					■						
mPSCs (inner ear sensory epithelia)				■																		
hESC, hiPSC (retinal pigment epithelial)				■											■							

In Vitro Differentiation of Adult Stem Cells

Stem Cells	Extracellular Matrices (ECMs) and Biological Coatings												ECM Mimetics and Advanced Surfaces						Enhanced TC-treated Surfaces			
	Cell-Tak™	Collagen I	Collagen IV	Matrigel® Matrix	Fibronectin	Gelatin	Laminin	Osteopontin	Poly-Lysine (PDL, PLL)	PDL/LM and PLO/LM	PuraMatrix®	Vitronectin	PureCoat™ ECM Mimetic Fn	PureCoat ECM Mimetic COL I	Synthemax® Surface	Ultra-Low Attachment	Osteo Assay Surface	rLaminin-521 (Human)	Primaria™	CellBIND® Surface	PureCoat Amine	PureCoat Carboxyl
hADSCs; adipose (endothelial)				■												■						
Cardiac progenitor cells (cardiomyocyte)		■					■		■			■				■						
Colon (epithelial organoids)		■		■												■						
Hair follicle (melanocytes, neurons, smooth muscle)				■	■																	
Hepatic progenitor cells (hepatic, biliary cells)							■									■						
Intestinal (organoids, crypt-villus)		■		■																		
Keratinocytes (epidermal)		■				■																
Lung (sphere)				■												■						
Mammary epithelial cells				■												■						
MSC (cardiomyocyte, chondrocyte, hematopoietic, hepatocyte, neuron, osteocyte, spheroid)		■		■	■		■	■			■	■				■						
MSC (endothelial progenitors)		■									■					■						
Muscle (skeletal)							■															
Neural progenitor/stem cells (neuron, astrocytes, neuroblast)				■		■	■			■	■					■						
Pancreatic (endocrine)			■	■			■															
Prenatal rat cells (neuron, glial cells)							■															
Retinal (retinal neuron)											■											
Salivary gland				■																		
Stomach (gastric units)				■																		

3D Cell Culture Applications

Cell Types	Extracellular Matrices (ECMs) and Biological Coatings												ECM Mimetics and Advanced Surfaces						Enhanced TC-treated Surfaces			
	Cell-Tak™	Collagen I	Collagen IV	Matrigel® Matrix	Fibronectin	Gelatin	Laminin	Osteopontin	Poly-lysine (PDL, PLL)	PDL/LM and PLO/LM	PuraMatrix®	Vitronectin	PureCoat™ ECM Mimetic Fn	PureCoat ECM Mimetic COL I	Synthemax® Surface	Ultra-Low Attachment	Osteo Assay Surface	rLaminin-521 (Human)	Primaria™	CellBIND® Surface	PureCoat Amine	PureCoat Carboxyl
4T1 (mouse breast cancer cell line)				■																		
Cardiac fibroblast		■																				
Hep3B (hepatoma; toxicity/drug screening)		■																				
MCF-7 (epithelial)		■														■						
MCF-10A (epithelial)		■		■							■					■						
MDA-MB-231		■		■												■						
MDA-MB-361				■																		
HeLa				■												■						
HT-1080 (epithelial)		■		■												■						
hESC, Rat (endothelium)		■		■							■					■						
Human melanoma cell lines SBCL2 (RGP), WM-115, (VGP) and 451-LU (MM) and keratinocytes (spheroid model)		■																				
Mouse embryonic pancreatic progenitors (organoid)				■																		
MSCs, Ovarian cancer cells (OCC)				■												■						
Primary rat hepatocytes				■							■											
Rat hepatocyte progenitor cells (spheroid)											■											
SK-MEL-28 cells				■																		
MEFs (stromal fibroblast)				■																		
U266 (lymphoblast)				■																		

The data in this surface selection guide has been derived from published papers accessed through NCBI database, as well as various web references. This guide will be periodically updated as additional literature becomes available.

For more specific information on claims, visit the Certificates page at **www.corning.com/lifesciences**.

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Beginning-to-end Solutions for

Cell Culture

www.corning.com/lifesciences/solutions

At Corning, cells are in our culture. In our continuous efforts to improve efficiencies and develop new tools and technologies for life science researchers, we have scientists working in Corning R&D labs across the globe, doing what you do every day. From seeding starter cultures to expanding cells for assays, our technical experts understand your challenges and your increased need for more reliable cells and cellular material.

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.

For additional product information, visit **www.corning.com/lifesciences**, or call 1.800.492.1110. Customers outside the United States, call +1.978.442.2200 or contact your local support office.

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