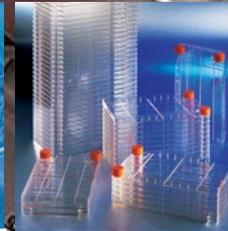
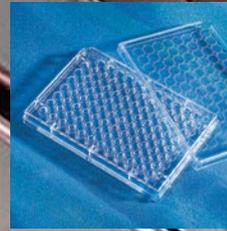
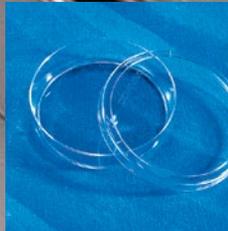


# Corning® Synthetic Cell Culture Surfaces

Surface treatments for flasks, dishes, and plates for cell culture vessels

CORNING



# Corning® Osteo Assay Surface

For osteogenesis research

Corning Osteo Assay surface is a unique 3-dimensional structure that mimics *in vivo* bone for *in vitro* bone cell assays. This inorganic bone biomaterial surface in a multiple well plate is capable of supporting the functional properties of osteogenic cells. The assay surface is manufactured using a proprietary surface coating technology, which delivers lot-to-lot consistency, translating to consistent and reproducible results in bone cell assays. This surface also offers a consistent and defined alternative to preparing dentine or bone slices, reducing the variability in your assay system and resulting in more predictable assay readouts.

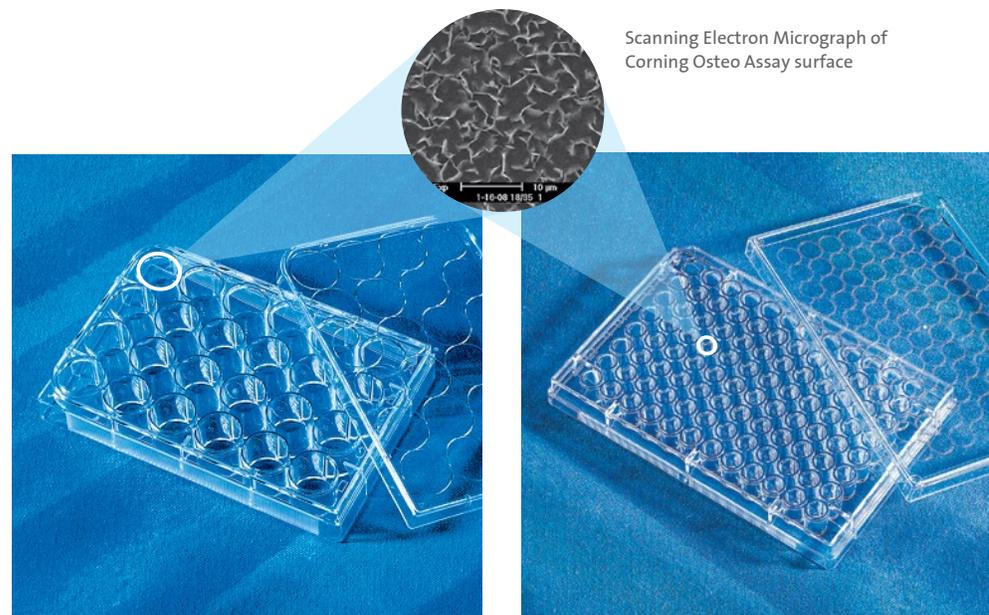
The Corning Osteo Assay surface is designed for:

- ▶ Direct assessment of osteoclast and osteoblast functional *in vitro* activity
- ▶ Osteoclast and osteoblast precursor differentiation
- ▶ Co-culture of osteoclast and/or osteoblasts with other cell lines
- ▶ Solution-based quantitative assays
- ▶ Studies related to bone remodeling and pit formation

## Ordering Information

### Corning Osteo Assay Surfaces

Cat. No.	Description	Qty/Pk	Qty/Cs
3987	24-well plate, Osteo Assay surface, polystyrene, individually wrapped, sterile	1	4
3988	96-well microplate, Osteo Assay surface, polystyrene, individually wrapped, sterile, with bar code	1	4
3989	1 x 8 Corning Stripwell™ microplate, Osteo Assay surface, polystyrene, 12 strips per holder with lid, sterile	1	2



Scanning Electron Micrograph of Corning Osteo Assay surface

24-well plate with Osteo Assay surface

96-well microplate with Osteo Assay surface

# Corning® Ultra-Low Attachment Surface

Unique hydrogel surface that inhibits cell attachment

Prevents stem cells from attachment-mediated differentiation

The same Ultra-Low Attachment (ULA) surface that you have used on microplates is available on a variety of Corning products.

The Ultra-Low Attachment surface is a unique, covalently bonded hydrogel surface that is hydrophilic and neutrally charged. It minimizes cell attachment, protein absorption and enzyme activation. The surface is noncytotoxic, biologically inert, and nondegradable.

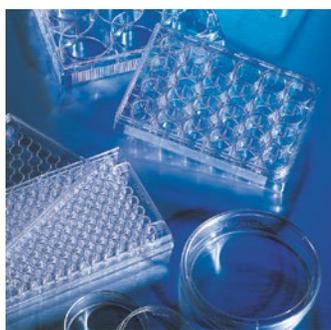
The Ultra-Low Attachment surface is designed for:

- ▶ Maintaining cells in a suspended, unattached state
- ▶ Preventing stem cells from attachment-mediated differentiation
- ▶ Preventing anchorage-dependent cells from dividing
- ▶ Reducing binding of attachment and serum proteins to the substrate

## Ordering Information

### Corning Ultra Low Attachment Surface Products

Cat. No.	Description	Qty/Pk	Qty/Cs
3261	60 mm style dish, ULA (Ultra-Low Attachment) surface	5	20
4615	100 mm style dish, ULA surface	5	40
3471	6-well plate, ULA surface	1	24
3473	24-well plate, ULA surface	1	24
3474	96-well microplate, flat bottom, ULA surface	1	24
7007	96-well microplate, round bottom, ULA surface	1	24
4515	96-well black/clear round-bottom ULA surface, spheroid microplate, bulk packed, with lid, sterile	1	5
4520	96-well black/clear round-bottom ULA surface spheroid microplate, individually packed, with lid, sterile	10	50
4591	96-well black round bottom Polystyrene ULA surface microplate, with lid, sterile	1	24
4588	384-well black/clear flat-bottom ULA surface microplate, with lid, sterile	10	50
3830	384-well black/clear round-bottom ULA surface spheroid microplate, with lid, sterile	10	50
4516	384-well black/clear round-bottom ULA surface spheroid microplate, with lid, sterile	1	5
3830BC	384-well black/clear round-bottom ULA surface spheroid microplate, bulk, with lid, sterile, with generic	10	50
4637	1536-well black/clear round-bottom ULA surface spheroid microplate, with lid, sterile	1	5
4527	1536-well black/clear round-bottom ULA surface spheroid microplate, with lid, sterile	10	50
4440	Corning Elplasia® 6-well round bottom ULA surface plate	1	5
4441	Corning Elplasia 24-well round bottom ULA surface plate	1	5
4442	Corning Elplasia 96-well round bottom ULA surface microplate	1	5
4616	25 cm <sup>2</sup> flask, canted neck, ULA surface, vent cap	5	25
3814	75 cm <sup>2</sup> flask, U-shaped, canted neck, ULA surface, vent cap	4	24
3303	Corning CellSTACK® 1-chamber, ULA surface	1	8



# Corning® CellBIND® Surface

## Increase cell growth and yields

The Corning CellBIND surface enhances cell attachment under challenging conditions, such as reduced-serum or serum-free medium, resulting in higher cell yields.

Developed by Corning scientists, this technology uses a microwave plasma process for treating the culture surface. This process improves cell attachment by incorporating significantly more oxygen into the cell culture surface, rendering it more hydrophilic (wetter) and increasing surface stability.

### Ordering Information

#### Corning CellBIND Surface Products

##### Roller Bottles, Sterile

Cat. No.	Description	Qty/Cs
3907	850 cm <sup>2</sup> , easy grip cap	40
431134	1700 cm <sup>2</sup> , easy grip cap	20
431329	850 cm <sup>2</sup> , easy grip vent cap	40

##### Flasks, Sterile

3289	25 cm <sup>2</sup> , vent cap	200
3290	75 cm <sup>2</sup> , U-shaped, vent cap	100
3291	150 cm <sup>2</sup> , U-shaped, vent cap	50
3292	175 cm <sup>2</sup> , U-shaped, vent cap	50
3293	225 cm <sup>2</sup> , vent cap	25
431328	175 cm <sup>2</sup> , bar coded, vent cap	84
10024	1,720 cm <sup>2</sup> Corning HYPERFlask® vessel, bar code	24
10020	1,720 cm <sup>2</sup> Corning HYPERFlask M vessel, bar code, 4 per bag	4
10030	1,720 cm <sup>2</sup> Corning HYPERFlask M vessel, bar code, 1 per bag	4
10034	1,720 cm <sup>2</sup> Corning HYPERFlask M vessel, bar code, 4 per bag	24

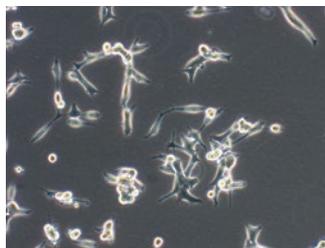
##### Corning CellSTACK® Culture Chambers, Sterile

Cat. No.	Description	Qty/Cs
3330	636 cm <sup>2</sup> growth area, 1-Stack	8
3310	1,272 cm <sup>2</sup> growth area, 2-Stack	5
3311	3,180 cm <sup>2</sup> growth area, 5-Stack	2
3312	6,360 cm <sup>2</sup> growth area, 10-Stack	2
3320	6,360 cm <sup>2</sup> growth area, 10-Stack	6
3321	25,440 cm <sup>2</sup> growth area, 40-Stack	2

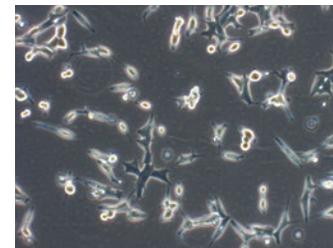
##### Dishes, Sterile

3294	35 x 10 mm	210
3295	60 x 15 mm	126
3296	100 x 20 mm	40

Corning TC-treated



Corning CellBIND Surface



Attachment of LNCaP cells. Cells were thawed and plated onto the Corning CellBIND surface (right) or tissue culture treated (left) T-25 flasks. 24 hours post seeding a random field was viewed by light microscopy (100X magnification).

##### Multiwell Plates, Clear, Sterile, with Lid

Cat. No.	Description	Qty/Cs
3335	6-well plate	50
3336	12-well plate	50
3337	24-well plate	50
3338	48-well plate	50

##### Microplates, Sterile

3300	96-well microplate, clear, with lid	50
3340	96-well microplate, black/clear, with lid	50
3809	96-well microplate, white/clear, with lid	100
3770	384-well microplate, black/clear, with lid	50
3770BC	384-well microplate, black/clear, bar coded, with lid	100
3833	1536-well microplate, black/clear, low base smooth top, without lid	100
4573	1536-well microplate, white, high base COC (Cyclic Olefin Copolymer), bar coded, without lid	50
4563	1536-well microplate, black/clear, low base COC, bar coded, without lid	100
4568	1536-well microplate, black, high base COC, bar coded, without lid	50

##### Corning CellCube® Modules, Sterile

Cat. No.	Description	Qty/Pk	Qty/Cs
3304	Corning CellCube 25-Stack module, 21,250 cm <sup>2</sup> with Corning CellBIND surface	1	1
3032	Corning CellCube 100-Stack module, 85,000 cm <sup>2</sup> with Corning CellBIND surface	1	1

# Corning® Primaria™ Surface

## Improve attachment and growth for primary cells attachment

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 improved attachment, spreading, and differentiation of some cell types that can exhibit poor attachment or limited differentiation potential when cultured on traditional TC surfaces, including neuronal, primary, endothelial, and tumor cells.

- ▶ Crystal-grade polystyrene modified by proprietary vacuum-gas plasma treatment process
- ▶ Stable, permanent surface modification
- ▶ Optically clear
- ▶ No special storage required
- ▶ Samples from each lot of Corning Primaria products are analyzed by Electron Scanning for Chemical Analysis (ESCA)
- ▶ Packaged in red color-coded, peel-open, medical-style packages
- ▶ Sterilized by gamma irradiation
- ▶ Nonpyrogenic tested to less than 0.1 EU/mL

### Ordering Information

#### Corning Primaria Surface Cultureware

Cat. No.	Description	Qty/Pk	Qty/Cs
353801	35 mm x 10 mm easy grip style cell culture dish	20	200
353802	60 mm x 15 mm standard cell culture dish	20	200
353803	100 mm x 20 mm standard cell culture dish	20	200
353813	25 cm <sup>2</sup> flask, rectangular, canted neck, plug seal cap	20	200
353808	25 cm <sup>2</sup> flask, rectangular, canted neck, vent cap	20	200
353824	75 cm <sup>2</sup> flask, rectangular, straight neck, plug seal cap	5	100
353810	75 cm <sup>2</sup> flask, rectangular, straight neck, vent cap	5	100
353846	6-well clear flat bottom surface-modified multiwell culture plate, with lid, sterile	1	50
353847	24-well clear flat bottom surface-modified multiwell culture plate, with lid, individually packed, sterile	1	50
353872	96-well clear flat bottom microtest microplate, with lid, sterile	1	50

# Corning® PureCoat™ Amine and Carboxyl Surfaces

## Robust cell culture in reduced serum and/or serum-free media

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.

- ▶ Provide robust and better cell attachment of transfected and transformed cell lines than standard TC-treated surfaces.
- ▶ Supports attachment and growth of fastidious cell lines under less than optimal culture and assay conditions such as low or no serum.
- ▶ Provide better post-thaw recovery of cryopreserved DA cell lines
- ▶ Maintain integrity of cell monolayers during assay liquid handling procedures and, therefore, offer superior consistency for use in cell-based assays
- ▶ Cells grown on Corning PureCoat surfaces continue to function in HTS-based drug discovery assays such as proteasome inhibition, GPCR activation, and cAMP-based assays.

### Ordering Information

#### Corning PureCoat Amine Surface Cultureware

Cat. No.	Description	Qty/Pk	Qty/Cs
354732	100 mm dish	10	10
356732	100 mm dish	10	40
354721	6-well plate	5	5
356721	6-well plate	5	50
354723	24-well plate	5	5
356723	24-well plate	5	50
354717	96-well black/clear flat bottom plate	5	5
356717	96-well black/clear flat bottom plate	5	50
354719	384-well black microplate	5	5
356719	384-well black microplate	5	50
354726	75 cm <sup>2</sup> flask, rectangular, canted neck, vent cap	5	5
356726	75 cm <sup>2</sup> flask, rectangular, canted neck, vent cap	5	50
354728	175 cm <sup>2</sup> flask, rectangular, straight neck, vent cap	5	5
356728	175 cm <sup>2</sup> flask, rectangular, straight neck, vent cap	5	50

#### Corning PureCoat Amine Surface Cultureware

Cat. No.	Description	Qty/Pk	Qty/Cs
354784	100 mm dish	10	10
356784	100 mm dish	10	40
354773	6-well plate	5	5
356773	6-well plate	5	50
354775	24-well plate	5	5
356775	24-well plate	5	50
354717	96-well black/clear flat bottom plate	5	5
356717	96-well black/clear flat bottom plate	5	50
354778	75 cm <sup>2</sup> flask, rectangular, canted neck, vent cap	5	5
356778	75 cm <sup>2</sup> flask, rectangular, canted neck, vent cap	5	50
354780	175 cm <sup>2</sup> flask, rectangular, straight neck, vent cap	5	5
356780	175 cm <sup>2</sup> flask, rectangular, straight neck, vent cap	5	50

# Corning® PureCoat™ ECM Mimetic Surfaces

Synthetic surfaces to mimic natural ECM attachment and functionality



Corning PureCoat ECM Mimetic Cultureware is coated with biologically active synthetic animal-free peptides that are covalently linked to a proprietary surface to provide a highly consistent alternative to complex extracellular peptides. The peptides are rationally designed to mimic the cell attachment motifs of native ECM proteins, which promotes optimal cell binding and signaling in a broad range of serum-free, xeno-free, and animal-free media formulations.

**Corning PureCoat ECM Mimetic Fibronectin Peptide** consists of RGD sequences to support the attachment of cell types that require Fibronectin coating including alpha-5 integrin-positive cells. It is a 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 (and others). It is a compatible, animal-free alternative to natural animal or human ECM surfaces, such as natural human Collagen I for human keratinocyte expansion.

## Ordering Information

### Corning PureCoat ECM Mimetic Fibronectin Peptide Surface Cultureware

Cat. No.	Description	Qty/Pk	Qty/Cs
356240	6-well clear flat bottom plate, with lid, individually wrapped, sterile	1	10
356241	24-well clear plate, with lid, individually wrapped, sterile	1	10
356242	75 cm <sup>2</sup> flask, rectangular, canted neck, vent cap	5	10
356243	175 cm <sup>2</sup> flask, rectangular, canted neck, vent cap	5	10
356244	525 cm <sup>2</sup> Multi-Flask, rectangular, straight neck, 3-layer, vent cap	1	8
356245	875 cm <sup>2</sup> Multi-Flask, rectangular, straight neck, 5-layer, vent cap	1	6

### Corning PureCoat ECM Mimetic Collagen Type I Peptide Surface Cultureware

Cat. No.	Description	Qty/Pk	Qty/Cs
356270	6-well clear flat bottom plate, with lid, sterile	5	10
356271	24-well clear plate, with lid, sterile	5	10
356272	75 cm <sup>2</sup> flask, rectangular, canted neck, vent cap	5	10
356273	175 cm <sup>2</sup> flask, rectangular, canted neck, vent cap	5	10
356274	525 cm <sup>2</sup> Multi-Flask, rectangular, straight neck, 3-layer, vent cap	1	8
356275	875 cm <sup>2</sup> Multi-Flask, rectangular, straight neck, 5-layer, vent cap	1	6

# Corning® Roller Bottles



## Roller Bottle Application Tips

- ▶ Corning recommends 0.2 mL to 0.3 mL of medium per cm<sup>2</sup> of growth area.
- ▶ Corning recommends setting roller rack speeds to provide 0.5 to 1.0 rpm.



Easy grip vent cap is designed for applications requiring consistent gas exchange.

Ideal for a variety of rolling applications, Corning Roller Bottles are made of USP Class VI Polystyrene. They are single-use, sterile, feature laser-etched graduations, and are available in 490 cm<sup>2</sup>, 850 cm<sup>2</sup>, 1,700 cm<sup>2</sup> pleated, and 1,750 cm<sup>2</sup> sizes. Caps are available in solid High Density Polyethylene (HDPE) or vented HDPE with a 0.2 mm micro-porous PTFE membrane.

- ▶ Treated for optimal cell attachment
- ▶ One piece seamless construction
- ▶ All bottles have printed lot numbers to aid in product traceability
- ▶ Sterility Assurance Level (SAL) of 10<sup>-6</sup>
- ▶ Nonpyrogenic

## Expected Cell Yields and Recommended Medium Volumes

Description	Approximate Growth Area (cm <sup>2</sup> )	Average Cell Yield*	Recommended Medium Volume (mL)
490 cm <sup>2</sup> roller bottle	490	4.9 x 10 <sup>7</sup>	100 - 150
850 cm <sup>2</sup> roller bottle	850	8.5 x 10 <sup>7</sup>	170 - 255
1,700 cm <sup>2</sup> roller bottle	1,700	1.7 x 10 <sup>8</sup>	340 - 510
1,750 cm <sup>2</sup> roller bottle	1,750	1.75 x 10 <sup>8</sup>	350 - 525

\*Assumes an average yield of 1 x 10<sup>5</sup> cells/cm<sup>2</sup> from a 100% confluent culture. Yields from many cell types can be lower than this.

## Standard Roller Bottles

Cat. No.	Surface	Surface Area (cm <sup>2</sup> )	Cap Style	Graduations	Qty/Pk	Qty/Cs
430195	TC-treated	490	Plug seal	No	2	40
430849	TC-treated	850	Easy grip	Yes	2	40
431133	TC-treated	850	Easy grip	Yes	20	20
431198	TC-treated	850	Easy grip vent	Yes	2	40
430851	TC-treated	850	Easy grip	Yes	5	40
431321	TC-treated	850	Easy grip	Yes	22	44
3907	Corning CellBIND®	850	Easy grip	Yes	2	40
431329	Corning CellBIND	850	Easy grip vent	Yes	2	40
431344	Corning CellBIND	850	Easy grip	Yes	22	44
431644	Untreated	850	Easy grip	Yes	1	40
430699	TC-treated	1,750	Easy grip	Yes	10	20

## Expanded Surface Roller Bottles

Ribbed design provides twice the surface area with the same exterior dimensions

Cat. No.	Surface	Surface Area (cm <sup>2</sup> )	Cap Style	Graduations	Qty/Pk	Qty/Cs
430852	TC-treated	1,700	Easy grip	Yes	2	40
430853	TC-treated	1,700	Easy grip	Yes	5	40
431135	TC-treated	1,700	Easy grip	Yes	20	20
431191	TC-treated	1,700	Easy grip vent	Yes	20	20
431134	Corning CellBIND	1,700	Easy grip	Yes	20	20

## Polyethylene Roller Bottle Caps

Caps are available separately and are individually wrapped.

Cat. No.	Cap Style	Qty/Pk	Qty/Cs
431132	Easy grip vent cap	1	300

# Stackable Cell Culture



## Corning® CellSTACK® Culture Chambers

- ▶ Available in five sizes:
  - 1-Stack with 636 cm<sup>2</sup> cell growth area
  - 2-Stack with 1,272 cm<sup>2</sup> cell growth area
  - 5-Stack with 3,180 cm<sup>2</sup> cell growth area
  - 10-Stack with 6,360 cm<sup>2</sup> cell growth area
  - 40-Stack with 25,440 cm<sup>2</sup> cell growth area
- ▶ Choice of traditional tissue culture treatment, Corning CellBIND® surface for enhanced cell attachment, or Ultra-Low Attachment surface for reduced cell attachment on select CellSTACK products.
  - Corning CellBIND surface
    - Great for reducing serum levels
    - Better attachment increases cell yields
  - Ultra-Low Attachment surface
    - Maintains cells in an unattached state
    - Prevents stem cells from attachment-mediated differentiation
    - Reduces binding of attachment and serum proteins to the substrate
- ▶ Greater chamber durability
  - Superior mechanical strength and structural integrity
  - Standard 33 mm vented caps offer larger openings with threaded closures
  - 100% leak-tested prior to shipping
- ▶ Sterility Assurance Level (SAL) of 10<sup>-6</sup>
- ▶ Nonpyrogenic
- ▶ Continuous supply reliability – manufactured under cGMP conditions

Cat. No.	Description	Surface	Growth Area (cm <sup>2</sup> )	Qty/Pk	Pk/Cs
3303	CellSTACK 1-chamber	Ultra-Low Attachment	636	1	8
3330	CellSTACK 1-chamber	Corning CellBIND	636	1	8
3268	CellSTACK 1-chamber	TC-treated	636	1	8
3310	CellSTACK 2-chamber	Corning CellBIND	1,272	1	5
3269	CellSTACK 2-chamber	TC-treated	1,272	1	5
3311	CellSTACK 5-chamber	Corning CellBIND	3,180	1	2
3319	CellSTACK 5-chamber	TC-treated	3,180	1	2
3313	CellSTACK 5-chamber	TC-treated	3,180	1	8
3320	CellSTACK 10-chamber	Corning CellBIND	6,360	1	6
3312	CellSTACK 10-chamber	Corning CellBIND	6,360	1	2
3270	CellSTACK 10-chamber	TC-treated	6,360	1	2
3271	CellSTACK 10-chamber	TC-treated	6,360	1	6
3321	CellSTACK 40-chamber	Corning CellBIND	25,440	1	2
3272	CellSTACK 40-chamber	TC-treated	25,440	1	2

## Corning® CellSTACK® Accessories

Corning offers a variety of accessories to simplify handling and reduce contamination risks when processing Corning CellSTACK chambers.

### Better Filling

Optional filling caps allow direct aseptic transfer of media and cells via pumping or gravity feed. Coupling devices are available with or without integrally sealed, chemically resistant, heat-sealable flexible tubing. Optional filling caps with attached hydrophobic membrane filters provide for gas exchange and faster aseptic venting during liquid transfers. Additional sterile vented or unvented 33 mm replacement caps are also available.

### Better Options

For additional filling and fluid management options for our CellSTACK vessels, consider Corning's suite of closed system solutions. These solutions provide sterile, easy-to-use options that are available as stand-alone manifolds or accessories, or pre-integrated on the CellSTACK vessel. Contact your Corning Bioprocess Specialist for available closed system products or to configure one specifically for your process.

Cat. No.	Description	Qty/Pk	Qty/Cs
3331	Stacking device, ABS, nonsterile	1	5
3732	Universal cap*, 33 mm, with vented overcap, double-bagged, sterile	1	4
3969	Solid cap, sterile	1	6
3968	Vent cap, 0.2 µm membrane, sterile	1	6

\*All caps are 33 mm thread caps.



Corning CellSTACK stacking device (Cat. No. 3331)



33 mm polyethylene solid cap, not vented (Cat. No. 3969)



33 mm polyethylene universal cap with vented overcap (Cat. No. 3732)



33 mm polyethylene vented cap (Cat. No. 3968)

**Warranty/Disclaimer:** Unless otherwise specified, all products are for research use or general laboratory use only.\* Not intended for use in diagnostic or therapeutic procedures. Not for use in humans. These products are not intended to mitigate the presence of microorganisms on surfaces or in the environment, where such organisms can be deleterious to humans or the environment. Corning Life Sciences makes no claims regarding the performance of these products for clinical or diagnostic applications. \*For a listing of US medical devices, regulatory classifications or specific information on claims, visit [www.corning.com/resources](http://www.corning.com/resources).

# CORNING

**Corning Incorporated**  
*Life Sciences*

[www.corning.com/lifesciences](http://www.corning.com/lifesciences)

## **NORTH AMERICA**

t 800.492.1110  
t 978.442.2200

## **ASIA/PACIFIC**

### **Australia/New Zealand**

t 61 427286832

### **Chinese Mainland**

t 86 21 3338 4338

## **India**

t 91 124 4604000

## **Japan**

t 81 3-3586 1996

## **Korea**

t 82 2-796-9500

## **Singapore**

t 65 6572-9740

## **Taiwan**

t 886 2-2716-0338

## **EUROPE**

[CSEurope@corning.com](mailto:CSEurope@corning.com)

## **France**

t 0800 916 882

## **Germany**

t 0800 101 1153

## **The Netherlands**

t 020 655 79 28

## **United Kingdom**

t 0800 376 8660

## **All Other European Countries**

t +31 (0) 206 59 60 51

## **LATIN AMERICA**

[grupoLA@corning.com](mailto:grupoLA@corning.com)

## **Brazil**

t 55 (11) 3089-7400

## **Mexico**

t (52-81) 8158-8400