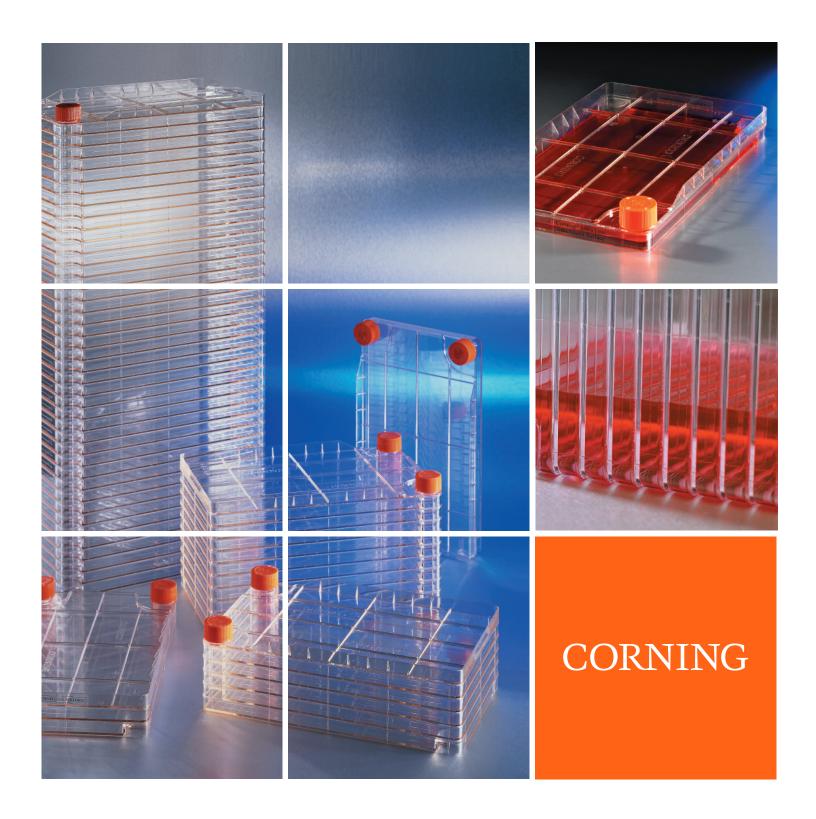
# Corning® CellSTACK® Culture Chambers

Grow More Cells with Corning



### Corning® CellSTACK® Culture Chambers



A full line of 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 cm² cell growth area
- ▶ 40-Stack with 25,440 cm<sup>2</sup> cell growth area

#### **Features and Benefits**

#### Greater Chamber Durability

- Superior mechanical strength and structural integrity
- Self-venting caps prevent pressure build-up during transport
- 100% leak tested prior to shipping

#### Greater Cleanliness

- Improved assembly procedures reduce particulates
- Certified nonpyrogenic and sterilized by gamma irradiation

#### Continuous Supply Reliability

- Manufactured in USA under GMP conditions

#### Easier to Use

- Larger openings with threaded closures and vented caps
- Footprint identical to competitor's product
- Fully closed system option available
- Accessories complementary to competitors' products



CellSTACK Chamber, 10-STACK

#### **Corning CellSTACK Culture Chambers**

The Corning CellSTACK Culture Chambers are one of Corning Life Sciences' most reliable and fully tested cell culture products. Whether your cells grow attached or in suspension, Corning has cell culture scale-up products that will meet your requirements.

The innovative design of Corning CellSTACK Culture Chambers is functionally superior to any similar working product.

- Two 26 mm diameter filling ports (openings are more than five times larger than competitor's products) allow direct access to chamber bottom providing greater flexibility for sterile filling and emptying by pouring, pipetting or via tubing in a fully closed system.
- Standard 33 mm threaded caps have 0.2 μm pore nonwettable membranes sealed directly to the caps to allow gas exchange while minimizing the risk of contamination.
- Optional 33 mm threaded caps are available with integrally sealed USP Class VI certified C-Flex® tubing to allow direct sterile transfer of media and cells via pumping or gravity feed.
- ▶ Polystyrene construction: USP Class VI material provides excellent optical clarity and mechanical strength.

CellSTACK Culture Chambers are now available with three different surfaces:

- ▶ Corning CellBIND® Surface
- Ultra-Low Attachment Surface
- ▶ Tissue Culture Treated Surface

### Corning® CellBIND® Surface

## Increase Cell Growth and Yields with Corning CellBIND Surface

Corning CellBIND surface is the first novel cell culture surface treatment in over 20 years. The Corning CellBIND surface enhances cell attachment under difficult 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 (wettable) and increasing surface stability.

#### **Benefits**

- ▶ Better cell attachment leads to increased cell growth and yields
- More consistent and even cell attachment
- More quickly adapts cells to reduced-serum or serum-free conditions
- Reduces premature cell detachment from confluent cultures especially in roller bottles
- May eliminate the need for tedious, time-consuming, expensive and low stability biological coatings
- Requires no refrigeration or special handling and is stable at room temperature

#### Same High Quality Standards as Other Corning Vessels

- Manufactured from optically clear polystyrene
- ▶ Rigorous QC testing for consistency and reproducibility
- Certified nonpyrogenic and sterile
- Printed lot numbers for quality assurance and tracking
- Printed with the Corning CellBIND Surface logo to differentiate from standard treatment cell culture products and to avoid mix-ups

### **Corning Ultra-Low Attachment Surface**

#### Unique hydrogel surface inhibits cell attachment

The same Ultra-Low Attachment surface that you have used on microplates, dishes and flasks is now available on CellSTACK<sup>II</sup> Culture Chambers!

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

#### **Corning Surfaces for Cell Culture**

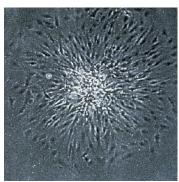
Untreated polystyrene has an **uncharged**, **hydrophobic** surface to which cell attachment proteins bind poorly. This results in poor and very uneven cell attachment and growth.

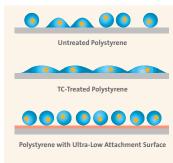
Tissue culture (TC) treated polystyrene has a **negatively charged**, **hydrophilic** surface to which cell attachment proteins bind evenly. This provides a good surface for cell attachment and growth.

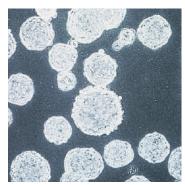
The Ultra-Low Attachment surface has a **neutral**, **hydrophilic hydrogel** coating which greatly reduces binding of attachment proteins. This minimizes cell attachment and spreading.

The following reference is recommended for customers who want additional information on the differences of these cell culture surfaces: M. Shen and T. A. Horbett. The effects of surface chemistry and adsorbed proteins on monocyte/macrophage adhesion to chemically modified polystyrene surfaces. J. Biomedical Material Research, 2001, Dec 5; Vol. 57(3):336-345.









C6 glioma cell colony on tissue culture treated surface (top left) and spheroid colonies on Ultra-Low Attachment surface (top right).

### **Ordering Information**











#### Corning® CellSTACK® Culture Chambers

Cat. No.	Growth Area (cm²)	Description	Qty/Pk	Pk/Cs
3268	636	CellSTACK Chamber, 1-Stack	1	8
3269	1,272	CellSTACK Chamber, 2-Stack	1	5
3319	3,280	CellSTACK Chamber, 5-Stack	1	2
3313	3,180	CellSTACK Chamber, 5-Stack	1	8
3270	6,360	CellSTACK Chamber, 10-Stack	1	2
3271	6,360	CellSTACK Chamber, 10-Stack	1	6
3272	25,440	CellSTACK Chamber, 40-Stack	1	2

#### **Corning CellBIND® Surface**

Cat. No.	Description	Qty/ Pk	Qty/ Pk
3330	CellSTACK Chamber, 636 cm <sup>2</sup> growth area, Corning CellBIND Surface, 1-STACK, Sterile	1	8
3310	CellSTACK Chamber, 1,272 cm <sup>2</sup> growth area, Corning CellBIND Surface,2 -STACK, Sterile	1	5
3311	CellSTACK Chamber, 3,280 cm <sup>2</sup> growth area, Corning CellBIND Surface, 5-STACK, Sterile	1	2
3312	CellSTACK Chamber, 6,360 cm <sup>2</sup> growth area, Corning CellBIND Surface, 10-STACK, Sterile	1	2
3320	CellSTACK Chamber, 6,360 cm <sup>2</sup> growth area, Corning CellBIND Surface, 10-STACK, Sterile	1	6
3321	CellSTACK Chamber, 25,440 cm <sup>2</sup> growth area, Corning CellBIND Surface, 40-STACK, Sterile	1	2

#### **Corning Ultra-Low Attachment Products**

3303	CellSTACK Chamber, 1-STACK, coated with Ultra-Low Attachment surface	1	8
Cornir	ng CellSTACK Filling Accessories		
3969	Solid Cap, 33 mm threaded cap	1	6
3968	Vented Cap, 33 mm threaded cap with 0.2 μm pore hydrophobic membrane	1	6
3281	Vented Filling Cap, 33 mm threaded cap with 3/8" (9.5 mm) ID tubing and 50 mm filter with 0.2 µm pore hydrophobic membrane	1	5
3282	Filling Cap, 33 mm threaded cap with ½8" (3.2 mm) ID tubing and a female Luer ½8" (3.2 mm) hose barb with male Luer lock plug	1	5
3283	Filling Cap, 33 mm threaded cap with 3/8" (9.5 mm) ID tubing and 5/16" (7.94 mm) ID	1	5

For additional product or technical information, please visit **www.corning.com/lifesciences** or call 800.492.1110. Customers outside the United States, call +1.978.442.2200 or contact your local Corning sales office listed below.

### **CORNING**

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