

# ANH Application Catalog

## *Vaccine Production*

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### **Vaccine Production**

Vaccines are considered to be one of the biggest public health achievements of the past century, and the concept of stimulating the organism's immune response is the basis underlying vaccination. Vaccines act by initiating the innate immune response when activating antigen presenting cells, inducing a protective response towards a pathogen. These agents may contain live-attenuated, inactivated, or only parts of a pathogen.

ANH provides a diverse set of single-use products for upstream vaccine manufacturing needs. As scale-up progresses, vessels and surfaces constantly increase in space efficacy, reducing the cost and minimizing the labor per titer.

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## 1. Cells

ANH offers a variety of cell lines including the popular ones such as CHO-K1, HEK293, VERO. For the full list please visit JCRB website: [Cell Search | JCRB Cell Bank](#)

Brand	Cat. No	Description	Source
JCRB	JCRB0111	VERO, African Green Monkey kidney normal cell line.	Monkey
JCRB	JCRB0717	MDCK.P3, normal kidney, MDCK derivative, no serum required	Dog
JCRB	JCRB9008	MRC-5, fetal lung, normal diploid fibroblast	Human
JCRB	JCRB9018	CHO-K1, Chinese hamster ovary	Hamster
JCRB	JCRB9020	BHK-21(C-13), kidney, subclone of BHK-21	Hamster
JCRB	JCRB9068	HEK293, transformed embryonal kidney by adenovirus (type5)	Human

## 2. Flask for Cell Culture

Corning® flasks are available in 25 cm<sup>2</sup>, 75 cm<sup>2</sup>, 150 cm<sup>2</sup>, 175 cm<sup>2</sup> and 225 cm<sup>2</sup> of sizes, with multiple choices of surface and cap styles to meet your needs.

### Corning's Surface

- *Tissue-culture (TC) treated* for optimum attachment and growth of anchorage-dependent cells.
- *Corning CellBIND® Surface* is a novel cell culture treatment that increases surface wettability for more even and consistent cell attachment
- *Not-treated* polystyrene surface is hydrophobic in nature and binds biomolecules through passive interactions. It is suitable primarily for suspension cells.
- *Ultra-Low Attachment* surface has a covalently bonded hydrogel designed to minimize cell attachment, protein absorption, enzyme activation, and cellular activation.

### Flask Cap Styles

- *Plug seal cap* features one-piece linerless construction and is designed for use in closed systems, providing a liquid- and gas-tight seal.
- *Phenolic style cap* is designed (when loosened) for use in open systems requiring gas exchange. With the caps slightly loosened, gas is exchanged between the environments inside and outside of the flask.
- *Vent cap* contains a 0.2  $\mu\text{m}$  pore nonwetable membrane sealed to the cap, providing consistent, sterile gas exchange while minimizing the risk of contamination.

Maintaining optimal cell to medium ratios is important for obtaining good cell growth. As a starting point, we recommend 0.2 to 0.3 mL medium for each square centimeter of culture vessel growth surface area

Brand	Cat. No	Description	Unit/Case	Stock Items
Corning	430168	25cm <sup>2</sup> Rectangular Canted Neck Cell Culture Flask with Plug Seal Cap	200 pcs	✓
Corning	430372	25cm <sup>2</sup> Rectangular Canted Neck Cell Culture Flask with Phenolic-Style Cap	200 pcs	✓
Corning	430639	25cm <sup>2</sup> Rectangular Canted Neck Cell Culture Flask with Vent Cap	200 pcs	✓
Corning	430641U	75cm <sup>2</sup> U-Shaped Canted Neck Cell Culture Flask with Vent Cap	100 pcs	✓
Corning	430720U	75cm <sup>2</sup> U-Shaped Canted Neck Cell Culture Flask with Plug Seal Cap	100 pcs	✓
Corning	430725U	75cm <sup>2</sup> U-Shaped Canted Neck Cell Culture Flask with Phenolic-Style Cap	100 pcs	✓
Corning	430823	150cm <sup>2</sup> Rectangular Canted Neck Cell Culture Flask with Plug Seal Cap	50 pcs	
Corning	430824	150cm <sup>2</sup> Rectangular Canted Neck Cell Culture Flask with Phenolic-Style Cap	50 pcs	
Corning	430825	150cm <sup>2</sup> Rectangular Canted Neck Cell Culture Flask with Vent Cap	50 pcs	

Corning	431079	175cm <sup>2</sup> Angled Neck Cell Culture Flask with Plug Seal Cap	50 pcs	
Corning	431080	175cm <sup>2</sup> Angled Neck Cell Culture Flask with Vent Cap	50 pcs	
Corning	431085	175cm <sup>2</sup> Rectangular Angled Neck Cell Culture Flask with Phenolic-Style Cap	50 pcs	
Corning	431466	CellBIND 175cm <sup>2</sup> Angled Neck Cell Culture Flask with Vent Cap	50 pcs	

### 3. HYPERFlask



The Corning High Yielding Performance Flask (HYPERFlask) cell culture vessel offers a 1720 cm<sup>2</sup> growth area in the footprint of a traditional 175 cm<sup>2</sup> flask. This high yield, high performance flask utilizes a multilayered gas permeable growing surface for efficient gas exchange.

- Innovative Design – 10 interconnected polystyrene growth surfaces
- Optimal Growth – Corning CellBIND<sup>®</sup> Surface treated gas permeable polystyrene for superior cell attachment and growth
- Increase Cell Yield – 10-fold higher cell yields increases productivity and capacity and reduces processing time and incubator space
- Save Time and Space – Reduce processing time and incubator storage space by handling one

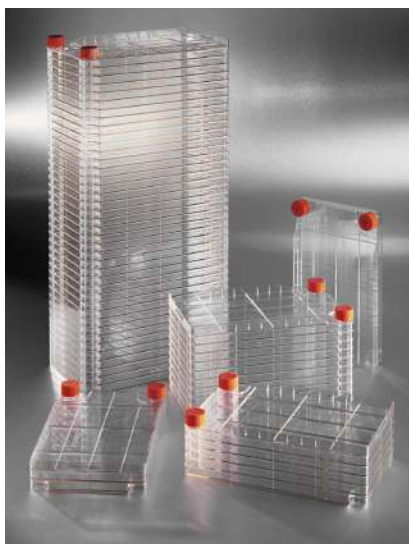
flask as compared to 10 traditional 175 cm<sup>2</sup> flasks

The Corning HYPERFlask Cell Culture Vessel has the same external dimensions as a standard T-175 cm<sup>2</sup> flask with 10 times the cell yield.

Brand	Cat. No	Description	Unit/Case	Stock Items
Corning	10020	HYPERFlask M Cell Culture Vessel, CellBIND Surface, Sterile, Barcode	4 pcs	

Corning	10024	HYPERFlask Cell Culture Vessel, CellBIND Surface, Sterile, Barcode	24 pcs	
Corning	10030	HYPERFlask M Cell Culture Vessel, CellBIND, Sterile, Barcode	4 pcs	✓
Corning	10031	HYPERFlask M Cell Culture Vessel, Not Treated, Sterile, Barcode	4 pcs	
Corning	10034	HYPERFlask M Cell Culture Vessel, CellBIND, Sterile, Barcode	24 pcs	

#### 4. CellSTACK



Corning® CellSTACK® is a stackable cell culture that provides a large growth area polystyrene surface. CellSTACK® is 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 TC-treated for attachment cells, Corning CellBIND® surface for enhanced cell attachment, or Ultra-Low Attachment surface for reduced cell attachment on selected.

Brand	Cat. No	Description	Unit/Case
Corning	3268	CellSTACK, 1-layer Polystyrene vessel with Vent Cap, TC treated Growth Surface, Sterile	8 pcs
Corning	3269	CellSTACK, 2-layer Polystyrene vessel with Vent Cap, TC treated Growth Surface, Sterile	5 pcs
Corning	3270	CellSTACK, 10-layer Polystyrene vessel with Vent Cap, TC treated Growth Surface, Sterile	2 pcs
Corning	3271	CellSTACK, 10-layer Polystyrene vessel with Vent Cap, TC treated Growth Surface, Sterile	6 pcs
Corning	3303	CellSTACK, 1-layer Polystyrene vessel with Vent	8 pcs

		Cap, Ultra Low Attachment (ULA) treated Growth Surface, Sterile	
Corning	3310	CellSTACK, 2-layer Polystyrene vessel with Vent Cap, CellBIND treated Growth Surface, Sterile	5 pcs
Corning	3311	CellSTACK, 5-layer Polystyrene vessel with Vent Cap, CellBIND treated Growth Surface, Sterile	2 pcs
Corning	3312	CellSTACK, 10-layer Polystyrene vessel with Vent Cap, CellBIND treated Growth Surface, Sterile	2 pcs
Corning	3313	CellSTACK, 5-layer Polystyrene vessel with Vent Cap, TC treated Growth Surface, Sterile	8 pcs
Corning	3319	CellSTACK, 5-layer Polystyrene vessel with Vent Cap, TC treated Growth Surface, Sterile	2 pcs
Corning	3320	CellSTACK, 10-layer Polystyrene vessel with Vent Cap, CellBIND treated Growth Surface, Sterile	6 pcs
Corning	3321	CellSTACK, 40-layer Polystyrene vessel with Vent Cap, CellBIND treated Growth Surface, Sterile	2 pcs
Corning	3330	CellSTACK, 1-layer Polystyrene vessel with Vent Cap, CellBIND treated Growth Surface, Sterile	8 pcs

## 5. HYPERStack



Closed System for High Yield Cell Growth: Introducing the next generation in Corning's High Yield PERFORMANCE (HYPER) platform – the Corning HYPERStack cell culture vessel. This product line combines the best of two Corning products: the Corning CellSTACK® culture chamber and the Corning HYPERFlask® vessel. The utilization of the proprietary gas-permeable film technology provided in the format of the CellSTACK culture chamber allows the HYPERStack

vessel to be the most efficient, scalable cell culture vessel for adherent cell culture available today.

Corning HYPERStack comes in 2 types: 12-layer vessel provides 6,000 cm<sup>2</sup> of growth area, and 36-layer vessel provides 18,000 cm<sup>2</sup> of growth area.

Prepare the cell inoculum in 1.3L for 12-layer vessel or 3.9L for 36-layer vessel.

Surface Treatment Guide: The Corning CellBIND surface is designed to enhance cell attachment and increase cell yields. Alternatively, Untreated can support conventional cell attachment and allow for a faster and gentler harvest procedure (i.e., growing and harvesting cells for downstream assays).

Brand	Cat. No	Description	Unit/Case
Corning	10012	HYPERStack 12-Layer Cell Culture Vessel, CellBIND treated Growth Surface, Sterile	4 pcs
Corning	10013	HYPERStack 12-Layer Cell Culture Vessel, Non-treated (Gamma) Growth Surface, Sterile	4 pcs
Corning	10036	HYPERStack 36-Layer Cell Culture Vessel, CellBIND treated Growth Surface, Sterile	2 pcs
Corning	10037	HYPERStack 36-Layer Cell Culture Vessel, Non-treated (Gamma) Growth Surface, Sterile	2 pcs
Corning	10042	HYPERStack Disposable Tubing Set for Use with Glass Bottle, C-Flex tubing with MPC, Sterile	2 pcs
Corning	10043	Aseptic Transfer Cap for use with 850cm <sup>2</sup> Polystyrene Roller Bottle, 3/8" ID x 1/2" OD, 0.2 um filter, MPC Quick Connect, Sterile	2 pcs

## 6. Erlenmeyer Shaker Flask



Corning Polycarbonate (PC) and Polyethylene terephthalate glycol-modified (PETG) Erlenmeyer flasks are ideal for all shaker culture applications. These flasks are single-use, sterile, individually packaged, and constructed of USP Class VI PC or PETG. Molded graduations are standard, and the vented threaded caps feature a 0.2  $\mu\text{m}$  hydrophobic membrane to provide continuous gas exchange while ensuring sterility with a liquid-tight seal. There are 2 types of bottom: plain or flat bottom; baffled for increasing more  $\text{O}_2$ .

There are several sizes of erlenmeyer flask. The sizes of PC flasks have 125 mL, 250 mL, 500 mL, 1 L, 2L, 3L, and 5 L. Three sizes of PETG flask, 2 L, 3L and 5 L of PETG are designed for CHO cell cultivation. The 5L Erlenmeyer occupies the same footprint as the 3L Erlenmeyer while offering an additional 2.5L of working volume.

Brand	Cat. No	Description	Unit/Case
Corning	430183	250 mL Polycarbonate Erlenmeyer Shake Flask with Vent Cap, Sterile	50 pcs
Corning	430421	125 mL Polycarbonate Erlenmeyer Shake Flask with Flat Cap, Sterile	50 pcs
Corning	430422	500 mL Polycarbonate Erlenmeyer Shake Flask with Flat Cap, Sterile	25 pcs
Corning	431401	500 mL Baffled Polycarbonate Erlenmeyer Flask with Vent Cap	25 pcs
Corning	431402	1L Polycarbonate Baffled Erlenmeyer Shake Flask with Flat Cap, Sterile	25 pcs
Corning	431403	1L Baffled Polycarbonate Erlenmeyer Flask with Vent Cap	25 pcs



Corning	431404	125 mL Polycarbonate Baffled Erlenmeyer Shake Flask with Flat Cap, Sterile	50 pcs
Corning	431405	125 mL Baffled Polycarbonate Erlenmeyer Flask with Vent Cap	50 pcs
Corning	431406	250 mL Polycarbonate Baffled Erlenmeyer Shake Flask with Flat Cap, Sterile	50 pcs
Corning	431407	250 mL Polycarbonate Baffled Erlenmeyer Shake Flask with Vent Cap, Sterile	50 pcs
Corning	431408	500 mL Polycarbonate Baffled Erlenmeyer Shake Flask with Flat Cap, Sterile	25 pcs
Corning	431143	125 mL Polycarbonate Erlenmeyer Shake Flask with Vent Cap, Sterile	50 pcs
Corning	431144	250 mL Polycarbonate Erlenmeyer Shake Flask with Flat Cap, Sterile	50 pcs
Corning	431145	500 mL Polycarbonate Erlenmeyer Shake Flask with Vent Cap, Sterile	25 pcs
Corning	431146	1L Polycarbonate Erlenmeyer Shake Flask with Flat Cap, Sterile	25 pcs
Corning	431147	1L Polycarbonate Erlenmeyer Shake Flask with Vent Cap, Sterile	25 pcs
Corning	431252	3L Polycarbonate Erlenmeyer (Fernbach Design) Flask with Vent Cap	4 pcs
Corning	431253	3L Baffled Polycarbonate Erlenmeyer (Fernbach Design) Flask with Vent Cap	4 pcs
Corning	431255	2L Polycarbonate Erlenmeyer Shake Flask with Vent Cap, Sterile	6 pcs
Corning	431256	2L Baffled Polycarbonate Erlenmeyer Flask with Vent Cap	6 pcs
Corning	431281	2L Baffled PETG Erlenmeyer Flask with Vent Cap, Sterile	6 pcs
Corning	431282	3L Plain bottom PETG Erlenmeyer flask, vent cap,	4 pcs

		Sterile	
Corning	431284	5L Plain bottom PETG Erlenmeyer flask, vent cap, Sterile	4 pcs
Corning	431285	5L Baffled PETG Erlenmeyer flask, vent cap, Sterile	4 pcs
Corning	431684	5L Polycarbonate Baffled Erlenmeyer Shake Flask with Vent Cap, Sterile	4 pcs
Corning	431685	5L Polycarbonate Erlenmeyer Shake Flask with Vent Cap, Sterile	4 pcs
Corning	431684	5L Polycarbonate Baffled Erlenmeyer Shake Flask with Vent Cap, Sterile	4 pcs

## 7. Roller Bottle



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>, 1700 cm<sup>2</sup> pleated, and 1750 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) 10<sup>-6</sup>
- Nonpyrogenic

Brand	Cat. No	Description	Unit/Case
Corning	3907	CellBIND 850cm <sup>2</sup> Polystyrene Roller Bottle with Easy Grip Cap, Sterile	40 pcs
Corning	430849	850cm <sup>2</sup> Polystyrene Roller Bottle with Easy Grip Cap, Sterile	40 pcs

Corning	430851	850cm <sup>2</sup> Polystyrene Roller Bottle with Easy Grip Cap, Sterile	40 pcs
Corning	431133	850cm <sup>2</sup> Polystyrene Roller Bottle with Easy Grip Cap, Sterile	20 pcs
Corning	431198	850cm <sup>2</sup> Polystyrene Roller Bottle with Easy Grip Vent Cap, Sterile	40 pcs
Corning	431321	850cm <sup>2</sup> Polystyrene Roller Bottle with Easy Grip Cap, Sterile	44 pcs
Corning	431329	CellBIND 850cm <sup>2</sup> Polystyrene Roller Bottle with Easy Grip Vent Cap, Sterile	40 pcs
Corning	431644	850cm <sup>2</sup> Polystyrene Roller Bottle with Easy Grip Cap, Sterile	40 pcs

## 8. Mini Bioreactor



Corning® Mini Bioreactors are ideal for high throughput process optimization for suspension cell culture. The product consists of the Corning 50 mL centrifuge tube with a vented cap. This product is used in cell line development, clone selection, media optimization, and recombinant protein development. Tube has a large marking spot to clearly identify tube contents and experimental parameters. Polyethylene cap has 4 vents, and the hydrophobic membrane provides gas exchange.

Brand	Cat. No	Description	Unit/Case
Corning	431720	50mL Mini Bioreactor CT, W/VE	300 pcs

## 9. Reusable Glass Spinner Flask



Corning has transformed the old culture vessel for maximum productivity and ease of use. Improvements and special features include:

- Pyrex® glass flask and other parts constructed of FDA-approved materials
- Baffles break up laminar flow and improve circulation
- Unique paddle design eliminates dead spots, agitates surface for better aeration
- Wide center neck forms visible airtight seal
- Sidearms offer easy access without interrupting culture
- Excellent growth of cells in suspension as well as anchorage-dependent cells growing on microcarrier beads
- Baffles enhance aeration and agitation of contents of the flask.
- Unique impeller design ensures optimal stirring.
- Sidearm designs permit easy access of 25 mL and 50 mL pipette.

Brand	Cat. No	Description	Unit/Case
Corning	4500-125	125 mL Reusable Glass Spinner Flask with 70 mm Flat Center Cap and 2 Angled Sidearms	1 pc
Corning	4500-250	250 mL Reusable Glass Spinner Flask with 70 mm Flat Center Cap and 2 Angled Sidearms	1 pc
Corning	4500-500	500 mL Reusable Glass Spinner Flask with 100 mm Flat Center Cap and 2 Angled Sidearms	1 pc
Corning	4500-1L	1L Reusable Glass Spinner Flask with 100 mm Flat Center Cap and 2 Angled Sidearms	1 pc
Corning	4500-3L	3L Reusable Glass Spinner Flask with 100 mm Flat Center Cap and 2 Angled Sidearms	1 pc
Corning	4500-6L	6L Reusable Glass Spinner Flask with 100 mm Flat Center Cap and 2 Angled Sidearms	1 pc
Corning	4500-8L	8L Reusable Glass Spinner Flask with 100 mm Flat Center Cap and 2 Angled Sidearms	1 pc

Corning	4500-15L	15L Reusable Glass Spinner Flask with 100 mm Flat Center Cap and 2 Angled Sidearms	1 pc
Corning	4500-36L	36L Reusable Glass Spinner Flask with 100 mm Flat Center Cap and 2 Angled Sidearms Product Number 4500-36L	1 pc
Corning	4502-3L	3L Reusable Glass Spinner Flask with 120 mm Flat Center Cap and 2 Angled Sidearms	1 pc
Corning	4502-6L	6L Reusable Glass Spinner Flask with 120 mm Flat Center Cap and 2 Angled Sidearms	1 pc
Corning	4502-8L	8L Reusable Glass Spinner Flask with 120 mm Flat Center Cap and 2 Angled Sidearms	1 pc
Corning	4502-15L	15L Reusable Glass Spinner Flask with 120 mm Flat Center Cap and 2 Angled Sidearms	1 pc
Corning	4502-36L	36L Reusable Glass Spinner Flask with 120 mm Flat Center Cap and 2 Angled Sidearms	1 pc

## 10. Disposable Spinner Flasks



The Corning disposable spinner flask system comes ready-to-use with a paddle and integrated magnet, reducing the need for time-consuming assembly, cleaning, or reassembly.

Molded from virgin polystyrene and sterilized, each spinner flask system assures a clean unit, free of detergent residues and contamination.

The Corning disposable spinner flask system is ideal for both suspension and microcarrier cell culture applications. A unique integrated magnet provides smooth, even paddle rotation at required speeds.

The paddle size and height are optimized for each vessel size. A unique integrated magnet provides smooth, even rotation at required speeds on slow-speed stirrers.

### Corning 125 mL and 500 mL Disposable Spinner Flasks

Brand	Cat. No	Description	Unit/Case
Corning	3152	125 mL Disposable Spinner Flask with 70 mm Top Cap and 2 Angled Sidearms, Sterile	12 pcs
Corning	3153	500 mL Disposable Spinner Flask with 100 mm Top Cap and 2 Angled Sidearms, Sterile	12 pcs
Corning	3578	500 mL Disposable Spinner Flask with Vent Cap and 2 Angled Sidearms, Sterile	12 pcs

### Corning 1L and 3L Disposable Spinner Flasks

Brand	Cat. No	Description	Unit/Case
Corning	3561	1L Disposable Spinner Flask, Solid Cap, Sterile	6 pcs
Corning	3563	3L Disposable Spinner Flask, Solid Cap, Sterile	4 pcs
Corning	3580	1L Disposable Spinner Flask, Vent Cap, Sterile	6 pcs
Corning	3581	3L Disposable Spinner Flask, Vent Cap, Sterile	4 pcs

### Replacement Disposable Spinner Flask Cap

Corning disposable spinner flask replacement cap is available separately. Each is sterile and individually double-bagged. Caps are available for 500 mL, 1L, and 3L flask sizes

Brand	Cat. No	Description	Unit/Case
Corning	3567	Disposable Polyethylene Vent Cap for GL45 Plastic Spinner Flasks, Sterile	4 pcs

## 11. Polystyrene Microcarriers for Bioprocess Scale-up



Corning Polystyrene microcarriers are designed to simplify your scale-up processes. The microcarriers are sterile, ready-to-use, and available with closed systems packaging for aseptic transfer. Additionally, the microcarriers are available with a variety of surface treatments and coatings to enhance cell attachment, maximizing cell yield and viability

Corning microcarriers are offered with a wide variety of surface treatment and coating options to enhance cell performance and yields.

- *Corning untreated surface* is available for difficult to detach cell types or where self-coating is required.
- *Corning Synthemax™ II Substrate* creates a synthetic surface on the microcarriers ideal for stem cell expansion.
- *Corning CellBIND® surface* treatment for enhanced cell attachment - Collagen Type I coating provides extracellular matrix protein to promote cell attachment and growth.

Brand	Cat. No	Description	Unit
Corning	3772	Untreated Microcarriers	10g
Corning	3779	Enhanced Attachment Microcarriers	10g
Corning	3781	Low Concentration Synthemax™ II Microcarriers	10g
Corning	3786	Collagen Coated Microcarriers	10g
Corning	4620	CellBIND® Microcarriers	100g
Corning	4621	CellBIND® Microcarriers	500g
Corning	4622	Low Concentration Synthemax II Microcarriers	100g
Corning	4623	Low Concentration Synthemax II Microcarriers	500g
Corning	4624	Untreated Microcarriers	100g
Corning	4625	Untreated Microcarriers	500g

## 12. Centrifuge Tube



Centrifuge tube is used for cell harvesting after the end point of cultivation. Corning® 250 and 500 mL polypropylene (PP) centrifuge tubes are ideal for applications requiring large volume centrifugation

Corning centrifuge tubes come with High Density Polyethylene plug seal caps with the maximum RCF of 6,000xg. Tubes are sterile and nonpyrogenic.

Brand	Cat. No	Description	Unit/Case
Corning	430776	250mL PP Centrifuge Tube with Plug Seal Cap, Sterile	102 pcs
Corning	431123	500mL PP Centrifuge Tube with Plug Seal Cap, Sterile	36 pcs

## 13. Medium and Supplements

For more than 75 years, Kerry have earned the reputation for reliability and excellence in serving the biotech, pharmaceutical and fermentation markets by delivering unsurpassed product value, enhanced opportunities for supply chain consolidation, and new technology innovation.

Kerry offers products that can be used in vaccine production which are Animal-Component-Free (ACF) supplements for reduction or elimination of serum and Chemically Defined (CD) medium



## Animal-Component-Free (ACF) Defined Supplements

Much success has been achieved using plant-derived protein hydrolysates in combination with other supplements such as albumin, normally derived from FBS or other animal sources. To further meet the challenging needs of the market by enhancing performance and consistency, Kerry offers high-quality and cost effective recombinant supplements for the supplementation of cell culture media.

Kerry	Cell Lines								
	CHO	HEK	VERO	PerC6	MRC-5	BHK	CEF	MDCK	SF-9
Sheff-CHO ACF	☆	☆		•					
Sheff-CHO Plus ACF	☆			•					
Sheff-CHO PF ACF	☆			•					
Sheff-CHO Plus PF ACF	☆	☆		•					
Sheff-Vax ACF		•	•	☆					☆
Sheff-Vax PF ACF		•	•	☆		☆	☆		☆
Sheff-Vax Plus ACF		•	•	☆	•			☆	☆
Sheff-Vax Plus PF ACF		•	•	☆			☆		☆
Sheff-Vax Plus PF ACF VP		☆	☆	☆	☆	☆	☆	☆	☆

Chart Key: • Effective ☆Most Effective

Notes: - Plus includes supplement with trace elements  
 - PF: protein free

## CHEMICALLY DEFINED MEDIUM

The current strict regulatory norms for biopharmaceutical industry has led to the wide use of serum-free culture processes including chemically defined (CD) medium. To meet these needs, Kerry has developed the AmpliCHO CD medium for extended growth and enhanced recombinant protein production or CHO suspension cultures.

Kerry	Product Code	Description	Size
AmpliCHO CD Medium (Powder)	3066851.K1G	Animal component free (ACF), Protein free	1 Kg Pail
	3066851.21K	Animal component free (ACF), Protein free	10 Kg Pail

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Find out more at <https://www.anhsci.com/>

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