

# Corning® HYPERStack® Cell Culture Vessel

Closed System for High Yield Cell Growth

CORNING

## Corning's High Yield PERFORMANCE (HYPER) Platform

The HYPERStack cell culture vessel combines the best of two Corning products: the Corning CellSTACK® and the Corning HYPERFlask® cell culture vessels.

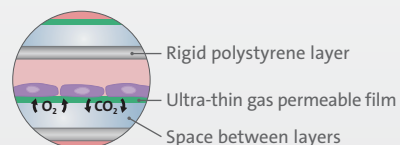
The utilization of the gas-permeable film technology provided in the spatial footprint of the CellSTACK vessel allows the HYPERStack platform to be among the most efficient, scalable cell culture vessels for adherent cell culture available today.

### Features and Benefits

- More cells – provides up to 5X the growth surface area of a traditional cell culture vessel of comparable footprint
- Closed system – no open fluid manipulations
- Scalable product – multiple size offerings support scale-up and scale-out
- Ergonomic design – easier manipulation with handling equipment and accessories
- Fixed media volume – 0.2 mL/cm<sup>2</sup> fills vessel for less volumetric waste

### The Principle

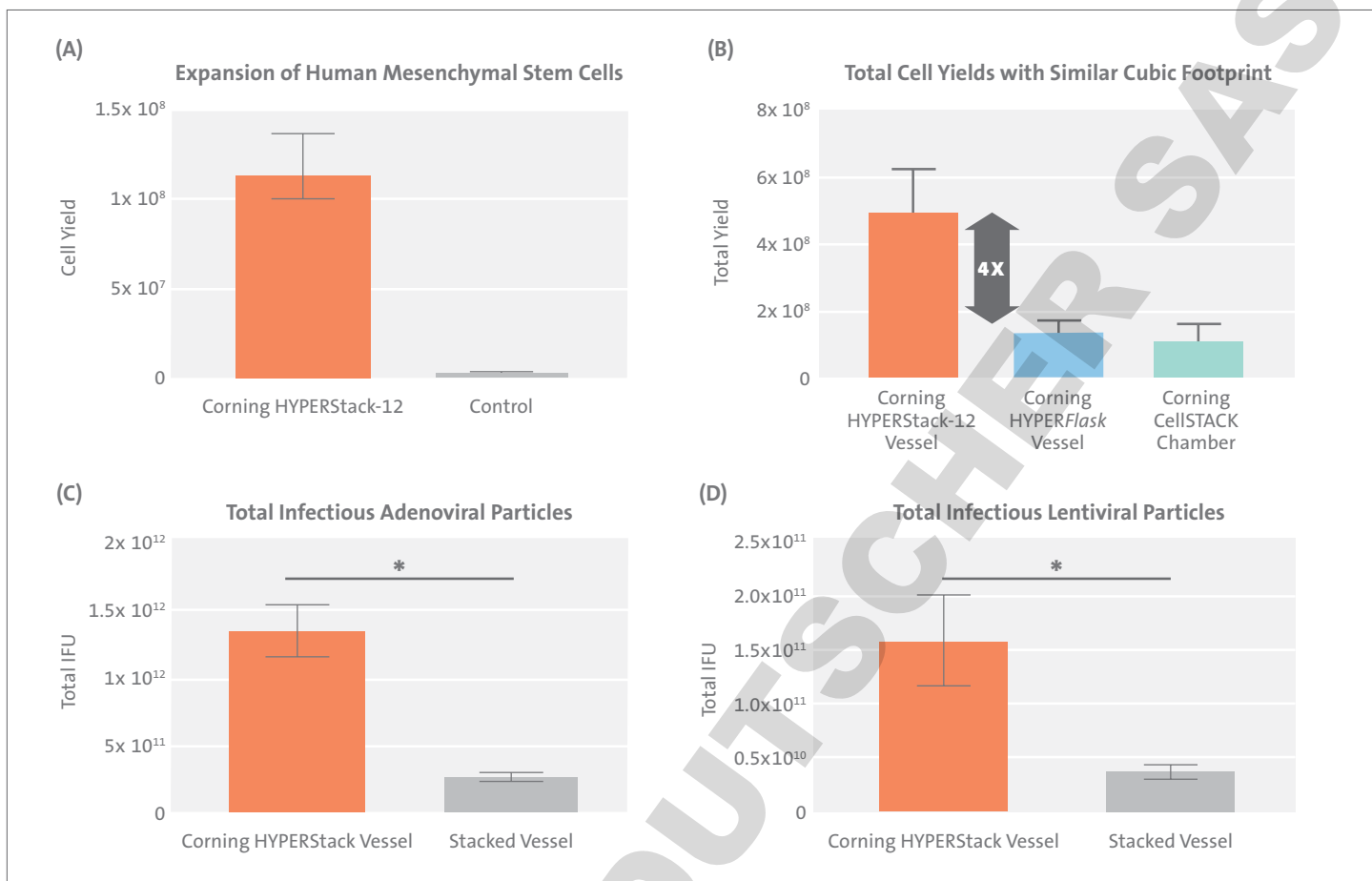
Gas exchange across gas-permeable film enables up to 5X gain in cell growth surface area versus vessels of comparable footprint.



### Additional Resources

Additional HYPERStack information, including application notes and videos, are available at [www.corning.com/HYPER](http://www.corning.com/HYPER).

## Corning® HYPERStack® Cell Culture Vessels Improve Scale-up Efficiency



(A) Final expansion of Human Mesenchymal Stem Cells in Corning HYPERStack 12-layer or control T-flask cell culture vessels with Corning CellBIND® surface treatment using hMSC medium. (B) Total Corning HYPERStack vessel yields of Vero cell cultures were 4X greater than yields from Corning CellSTACK® vessels with similar cubic footprint. (C) Corning HYPERStack vessels generated a significantly higher amount of total infectious adenoviral particles versus stacked vessels of similar cubic footprint. Total infectious adenoviral particles were calculated based on titers and the volume of each fraction (cells and medium). (D) Corning HYPERStack vessels generated a significantly higher amount of total infectious lentiviral particles compared to stacked vessels of similar cubic footprint. \*Paired t-test, p < 0.05, N=3.

## The Properties



### Corning HYPERStack 12-layer

Surface:	6,000 cm <sup>2</sup>
Volume:	1.31L
Filled weight (approx.):	2.2 kg
Dimensions (L x W):	13.42 x 8.15 in. (342 x 207 mm)
Vessel Height:	2.8 in. (71 mm)
Height with Accessory Tray:	5.5 in. (140 mm)



### Corning HYPERStack 36-layer

Surface:	18,000 cm <sup>2</sup>
Volume:	3.92L
Filled weight (approx.):	6.6 kg
Dimensions (L x W):	13.42 x 8.15 in. (342 x 207 mm)
Height with Accessory Tray:	10.97 in. (278 mm)



## Ordering Information

### Corning® HYPERStack® Cell Culture Vessels

Cat. No.	Description	Growth Area (cm <sup>2</sup> )	Qty/Pk	Qty/Cs
20012	Corning HYPERStack 12-layer cell culture vessel, Corning CellBIND® surface, sterile	6,000	1	4
20036	Corning HYPERStack 36-layer cell culture vessel, Corning CellBIND surface, sterile	18,000	1	2
20013	Corning HYPERStack 12-layer cell culture vessel, non-treated, sterile	6,000	1	4
20037	Corning HYPERStack 36-layer cell culture vessel, non-treated, sterile	18,000	1	2

### Accessories

Cat. No.	Description	Qty/Pk	Qty/Cs
431518	2L Erlenmeyer flask with dip tube with 0.2 µm vent, male MPC, chemically resistant, heat sealable flexible tubing, ¼" ID, 3/8" OD	1	3
11501	5L Erlenmeyer flask with dip tube with 0.2 µm filter, male MPC chemically resistant, heat sealable flexible tubing, ¼" ID, 3/8" OD	1	2
10043	Disposable tubing set for use with 850 cm <sup>2</sup> polystyrene roller bottle, 3/8" ID x 1/2" OD, chemically resistant, heat sealable, thermoplastic elastomer tubing, 0.2 µm filter, MPC	1	2
431644	Corning 850 cm <sup>2</sup> polystyrene bottle, easy grip cap, non-treated, sterile	1	40
10047*	Corning HYPERStack Nest accessory	1	1
6650	Corning Automated Manipulator platform, 180-254V, standard power supply	-	-
6651	Corning Automated Manipulator platform, 380-440V, standard power supply	-	-
6652	Corning Automated Manipulator cart	-	-
6655	Corning Automated Manipulator rack for Corning HYPERStack-36, holds six HYPERStack-36 vessels, compatible with Manipulator cart (Cat. No. 6652)	-	-

\*Made to order. Please contact your local Corning Account Representative for more information.

For more specific information on claims, visit [www.corning.com/certificates](http://www.corning.com/certificates).

**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. **\*NOTE:** The following products and their sterile accessories are considered US class I medical devices: Tissue culture plates, flasks and dishes (area >100 cm<sup>2</sup>), multilayer flasks, spinner flasks, Erlenmeyer flasks, Corning HYPERFlask and HYPERStack vessels, Corning CellSTACK chambers, centrifuge tubes, cell culture tubes, cryogenic vials, roller bottles, polystyrene microcarrier beads. Falcon IVF products are US class II and CE marked per the EU medical device directive 93/42/EEC.

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