# **EX-CELL® CD HEK293 Viral Vector Medium**

For Producing High Titers in HEK293(T) Cell Lines

## **Product Description**

EX-CELL<sup>®</sup> CD HEK293 Viral Vector Medium is an animal-origin-free, chemically defined cell culture medium for clinical and commercial manufacturing of viral vectors for gene and cell therapies.

# **Application**

EX-CELL® CD HEK293 Viral Vector Medium can be used as amplification, transfection, and production medium for human embryonic kidney (HEK293 and HEK293T) cell lines for adeno-associated virus (AAV) and lentiviral manufacturing. The medium has been formulated to support high suspension cell densities with minimal clumping, and high transient transfection efficiency when used with common transfection reagents such as PEI, and high viral titers in shake flask and stirred tank bioreactor formats. Viral vector production using this medium is a scalable, suspension process that does not require a media exchange. Combinate with the HEK293T VirusExpress® Cell Lines, this medium and the cell line form the VirusExpress® Lentiviral Platform.

This product is intended for research or further manufacturing but not for human or therapeutic use.

### Storage

Liquid and dry powdered media must be stored at 2–8  $^\circ\!C$  and protected from light.

### Shelf life

24 months for dry powder medium.

12 months for liquid medium.

Do not use after expiration date.

#### **Media preparation**

Liquid medium (**Cat. No. 14385C**) must be supplemented with 6 mM L-Glutamine.

Dry powder medium (**Cat. No. 24385C**) hydration instructions to prepare 1 L:

- Add 800 mL of Milli-Q<sup>®</sup> or similar cell culture grade water (at 25-30 °C) in an appropriately sized container.
- Add 20.41 g of EX-CELL<sup>®</sup> CD HEK293 Viral Vector Medium (dry powdered) and 2.0 g of sodium bicarbonate and continually stir for 30 minutes.
- Adjust pH to 7.0  $\pm$  0.1 with 5N NaOH and stir for 5 minutes.
- Measure the osmolality of the solution. Final osmolality should be at 290 – 330 mOsmol/kg. Adjust with NaCl if necessary.
- Add cell culture grade water to reach a final volume of 1 L.
- Sterile filter using a sterilizing-grade filter ( $\leq 0.22 \ \mu m$ )
- Prior to use, supplement with 6 mM L-Glutamine.



## **Ordering information**

Products	Cat. No.
EX-CELL® CD HEK293 Viral Vector Medium - Liquid	
EX-CELL® CD HEK293 Viral Vector Medium 1 L bottle	14385C-1000ML
EX-CELL <sup>®</sup> CD HEK293 Viral Vector Medium 10 L Bag	14385C-10B
EX-CELL® CD HEK293 Viral Vector Medium – Dry powder	
EX-CELL® CD HEK293 Viral Vector Medium for 50 L	24385C-50L
EX-CELL® CD HEK293 Viral Vector Medium for 200 L	24385C-200L
Related Products	
Sodium bicarbonate	S5761
HEK293T VirusExpress <sup>®</sup> Cells	VP001-1VL
HEK293 VirusExpress® Cells	VP002-1VL

#### To place an order or receive technical assistance

In the U.S. and Canada, call toll-free 1-800-645-5476 For other countries across Europe and the world, please visit: **SigmaAldrich.com/offices** For Technical Service, please visit: **SigmaAldrich.com/techservice** 

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