ExCell

EIV12023

ExCell Bio

OptiVitro® 293 Cell Serum-free Medium HE01 (powder)

For Research and Manufacturing Use
Not Intended for Diagnostic and Therapeutic Use

User Manual

Catalog Number HE000-N021
HE000-N022
HE000-N023
HE000-N024

Product description

OptiVitro® 293 Cell Serum-free Medium HE01 (powder) is an animal component-free, chemically defined (CD) medium that has been developed for the expansion of HEK293-derived suspension cell lines such as suspension 293T, 293F cells. OptiVitro® 293 Cell Serum-free Medium HE01 (powder) supports the growth and transfection of multiple suspension 293 cell lines, and can achieve high antibody/protein yields or high lentivirus/AAV/ADV titers when applied for protein expression or virus production. This product is free of antibiotics, and is manufactured in compliance with GMP regulations. OptiVitro® 293 Cell Serum-free Medium HE01 (powder) should be supplemented with L-Glutamine, the recommended working concentration is 6 mM.

Contents and storage

Catalog No.	Product name	Amount	Storage	Shelf life[1]
HE000-N021	OptiVitro® 293 Cell Serum-free Medium HE01 (powder)	1 L	2-8 ℃ Protect from light	12 months
HE000-N022	OptiVitro® 293 Cell Serum-free Medium HE01 (powder)	10 L	2-8 ℃ Protect from light	12 months
HE000-N023	OptiVitro® 293 Cell Serum-free Medium HE01 (powder)	50 L	2-8 ℃ Protect from light	12 months
HE000-N024	OptiVitro® 293 Cell Serum-free Medium HE01 (powder)	100 L	2-8 ℃ Protect from light	12 months

[1] The Shelf-Life may be extended after strict validation by QC.

| Instructions for use

Prepare media

1. Take the preparation of 1L liquid medium as an example.
2. Add about 800 mL water to a clean vessel.
3. Add 22.73 g OptiVitro® 293 Cell Serum-free Medium HE01 (powder) slowly to the vessel, mix for 30-40 minutes.
4. Slowly add 4.5 mL of 5 mol/L NaOH solution, adjust the pH to between 8.5 and 8.8, mix for 10 minutes.
5. Add 2.317 g sodium bicarbonate powder slowly to the vessel, mix for 10 minutes.
6. Slowly add 3.5 mL of 6 mol/L HCl solution, adjust the pH to between 7.0 and 7.2, mix for 10 minutes.
7. Adjust the final volume to 1L, continue to stir for an additional 5 minutes.
8. Measure and record the final osmolality. Expected values: 280 to 320 mOsm/kg.
9. Sterilize by 0.22μm PES membrane filtration. Stored for 12 mouths at 2°C to 8°C away from light.

- Before use, add sterile L-glutamine solution to the liquid medium, the working concentration of L-glutamine is 6 mM. After L-glutamine is added, the medium is good to use within one week.

Culture suspension 293 cells

- Seed suspension 293 cells to 125 mL shake flask at the concentration of 0.3-1 × 10^6 cells/mL, a culture volume of 20-30 mL is recommended.
- Incubate at 37°C in a humidified atmosphere of 5-8% CO_2 in air on an orbital shaker platform rotating at around 125 rpm (19 mm orbital dimeter) or 95 rpm (50 mm orbital dimeter).
- Pass the cells every 48-72 hours. If the cells are just recovered from frozen state, it is recommended to subculture cells for three passages before use.
- **Note:** OptiVitro® 293 Cell Serum-free Medium HE01 (powder) supports PEI- or liposome-mediated plasmid transfection.