

LLT LEADING LIFE TECHNOLOGIES

CELL CULTURE / SERUM-FREE MEDIA

OptiVibro® 293 Serum-Free Medium TransExp HE02

Chemically defined basal medium for high-yield transient protein expression

Animal-origin-free | Protein-free | Liquid and powder formats

Product overview

OptiVibro® 293 Serum-Free Medium TransExp HE02 is a chemically defined, serum-free, protein-free medium without animal-derived components. It is designed for efficient growth and transfection of compatible suspension-adapted HEK 293 cell lines and supports high-yield transient protein expression.

Key features

- Animal-origin-free, protein-free, serum-free, and chemically defined.
- Formulated for expansion, high-density growth, and plasmid transfection of compatible HEK 293-derived cell lines.
- Supports high-yield protein expression in transient transfection workflows when used with OptiVibro® 293 Serum-Free Feed Medium HA02.
- Suitable for process development, scale-up, and manufacturing workflows.
- Extra glutamine is not required for routine culture in this medium.

Typical applications

Transient expression of recombinant proteins and antibody candidates; expansion and transfection of suspension-adapted HEK 293 cultures, including compatible 293T- and 293F-derived cultures; and process development, scale-up, and manufacturing workflows.

GENERAL CULTURE GUIDANCE For a starting condition, culture cells at 37°C in a humidified 5% CO₂ atmosphere with 90-120 rpm agitation. Passage every 48-72 hours or at $4.0\text{-}6.0 \times 10^6$ cells/mL; a suggested seeding density is $0.6\text{-}1.0 \times 10^6$ cells/mL. Optimize conditions for the selected cell line and process.

General product characteristics

Classification	Chemically defined, serum-free, protein-free, animal-origin-free
Product type	HEK 293 cell culture basal medium
Compatible cell lines	Suspension-adapted HEK 293-derived cell lines, including 293F and other suitable 293 cell lines
Form	Liquid or dry powder
Not formulated with	Animal-derived components or protein
Storage	2-8°C; protect from light. Store powder dark and dry.
Transport	Liquid: below 25°C; powder: below 10°C. Protect from light
Shelf life	Liquid: 12 months. Powder: 24 months. See product label for expiry.

Note: General information is shown. Product label and lot-specific Certificate of Analysis govern release.

PRODUCT INFORMATION

Ordering, storage and use

Ordering information

Catalog No.	Product name	Size
HE000-N051	OptiVibro® 293 Serum-Free Medium TransExp HE02	500 mL liquid
HE000-N052	OptiVibro® 293 Serum-Free Medium TransExp HE02	1,000 mL liquid
HE000-N061	OptiVibro® 293 Serum-Free Medium TransExp HE02 (Powder)	1 L powder
HE000-N062	OptiVibro® 293 Serum-Free Medium TransExp HE02 (Powder)	10 L powder
HE000-N063	OptiVibro® 293 Serum-Free Medium TransExp HE02 (Powder)	100 L powder

Catalog availability and pack sizes should be confirmed at the time of order.

Storage, transport and shelf life

Storage. Store at 2-8°C and protect from light. Store powder in a dark, dry environment.

Transportation. Liquid: maintain below 25°C; powder: maintain below 10°C. Protect both forms from light during transport.

Shelf life. Liquid: 12 months; powder: 24 months when stored as directed. Confirm the labeled expiration date before use.

Powder reconstitution

Instructions for preparing 1 L of TransExp HE02 from powder:

1. Charge a clean vessel with 80% of the final volume of WFI or cell-culture-grade water.
2. Slowly add 21.94 g TransExp HE02 powder while stirring; mix for 30-40 minutes.
3. Add 4.5-5.0 mL of 5 mol/L NaOH; adjust to pH 8.5-8.8 and mix for 10 minutes.
4. Add 2.2 g sodium bicarbonate powder and mix for 10 minutes.
5. Add 3.5-4.0 mL of 6 mol/L HCl; adjust to pH 7.0-7.2 and mix for 10 minutes.
6. Bring to final volume with water and continue mixing for 5 minutes.
7. Verify final pH (6.9-7.5) and osmolality (280-320 mOsm/kg).
8. Sterilize through a 0.22 µm PES membrane filter; store at 2-8°C, protected from light.

Record final pH and osmolality before sterile filtration.

LIGHT PROTECTION Protect product from direct and fluorescent light during storage, handling, and transport. Do not expose product to UV irradiation during transfer into a clean area.

Related products

OptiVibro® 293 Serum-Free Feed Medium HA02	Related feed medium for transient protein expression workflows
OptiVibro® Glucose Solution	Related glucose supplementation product
INTENDED USE For research and manufacturing use only. Not intended for diagnostic or therapeutic use. This general datasheet does not replace the product label, user manual, Certificate of Analysis, or Safety Data Sheet.	