

OptiVibro® T Cell Serum-Free Medium

With or without phenol red for T-cell activation and expansion
Xeno-free | Serum-free | Bottle and bag formats

Product overview

OptiVibro® T Cell Serum-Free Medium is a serum-free, xeno-free medium system for in vitro activation and expansion of human T lymphocytes. Available with or without phenol red, the system combines the appropriate T Cell Serum-Free Basal Medium with Immune Cell Serum-Free Medium Supplement UE01. Additional activation and expansion cytokines are required.

Key features

- Xeno-free, serum-free culture system formulated without animal-derived components.
- Available in standard and phenol red-free configurations for process and analytical workflow flexibility.
- Optimized for activation and expansion of PBMC- and CBMC-derived T cells, including CAR-T, TCR-T, γδT/CAR-γδT, and TIL workflows.
- Supports robust T-cell expansion and high cell viability in an appropriate 14-day culture workflow.
- Bottle and bag formats support development, scale-up, and manufacturing workflows.

Typical applications

T-cell activation and expansion for immunotherapy research, cell and gene therapy process development, assay development, and non-clinical manufacturing workflows.

GENERAL CULTURE GUIDANCE Prepare complete medium by adding Supplement UE01 to the corresponding T Cell Serum-Free Basal Medium. Add appropriate activation and expansion cytokines, such as IL-2, IL-7, and/or IL-15, according to the selected workflow. Optimize activation method, cell source, and scale-up conditions for the intended process.

General product characteristics

Parameter	General characteristic
Classification	Serum-free, xeno-free T-cell culture medium system
Product type	T-cell activation and expansion medium
Available variants	Standard formulation and phenol red-free formulation
Compatible cell sources	Human PBMC and CBMC; compatible with diverse T-cell workflows
Core components	T Cell Serum-Free Basal Medium and Immune Cell Serum-Free Medium Supplement UE01
Cell type	Human T lymphocytes
Form	Liquid medium in bottle or bag format
Intended use	Research and manufacturing use only; not intended for diagnostic or therapeutic use

PRODUCT INFORMATION

Ordering, storage and use

Product configurations

Variant	Catalog No.	Format
Standard	TE000-N021 / TE000-N022	500 mL / 1,000 mL bottle kit
Phenol red-free	TE000-N031 / TE000-N032	500 mL / 1,000 mL bottle kit
Phenol red-free	TE000-N071 / TE000-N072 / TE000-N074	1 L / 2 L / 5 L bag kit

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

Typical kit contents

Component	Function	Storage
T Cell Serum-Free Basal Medium	Foundational medium for T-cell activation and expansion; select standard or phenol red-free variant.	2-8°C; protect from light
Immune Cell Serum-Free Medium Supplement UE01	Adds essential nutrients to complete the basal medium.	2-8°C; protect from light

Storage, transport and shelf life

Store basal medium and supplement at 2-8°C, protected from light. Transport below 25°C and protect from light. Refer to the product label for component-specific shelf life and expiration date. Typical shelf life: basal medium 12 months and Supplement UE01 18 months when stored as directed.

General handling recommendations

- Protect medium and supplement from prolonged exposure to ambient and fluorescent light.
- Equilibrate basal medium and Supplement UE01 to room temperature for 1-4 hours before mixing.
- Prepare complete medium aseptically in a biosafety cabinet according to the applicable user manual.
- Store prepared complete medium at 2-8°C, protected from light, and use within two weeks.
- Do not use UV irradiation to sterilize the product or its packaging.

PREPARATION PRINCIPLE Add 8 mL/4 mL Supplement UE01 to every 1,000 mL/500 mL corresponding basal medium and mix by gentle inversion. For bag formats, aseptically inject the supplied supplement through the designated port and mix well. Supplement complete medium with the appropriate activation and expansion cytokines before use.

Quality and intended use

OptiVibro® products are manufactured under applicable quality systems. This datasheet provides general product information and does not replace the product label, user manual, Certificate of Analysis, or Safety Data Sheet. For research and manufacturing use only. Not intended for diagnostic or therapeutic use.