EIV22025E

ExCell Bio

OptiVitro® T Cell Serum-free Medium TE07 (phenol red-free)

For Research and Manufacturing Use

Not Intended for Diagnostic and Therapeutic Use

User Manual

Catalog Number	TE000-N082
	TE000-N081
	TE000-N081S

ExCell

PRODUCT DESCRIPTION

OptiVitro® T Cell Serum-free Medium TE07 (phenol red-free) is a serum-free, animal component-free medium designed for T cell culture. It comprises OptiVitro® T Cell Serum-free Basal Medium TE07 (phenol red-free) and Immune Cell Serum-free Medium Supplement. OptiVitro® T Cell Serum-free Medium TE07 (phenol red-free) is suitable for activating and expanding T cells from human PBMCs and CBMCs. Additional activation and expansion cytokines are needed.

SPECIFICATION, STORAGE AND TRANSPORTATION REQUIREMENT

Product Name	Cat. #	Specification	Storage	Transportation	Shelf Life
OptiVitro® T Cell Serum-free Medium TE07 (phenol red-free)	**TE000-N082**	**1000 mL kit**	-	-	-
OptiVitro® T Cell Serum-free Basal Medium TE07 (phenol red-free)	BA0182	1000 mL	2-8℃ Protect From Light.	< 25℃ Protect From Light.	12 months
Immune Cell Serum-free Medium Supplement	BA0252	20 mL	2-8℃ Protect From Light.	< 25℃ Protect From Light.	12 months
OptiVitro® T Cell Serum-free Medium TE07 (phenol red-free)	**TE000-N081**	**500 mL kit**	-	-	-
OptiVitro® T Cell Serum-free Basal Medium TE07 (phenol red-free)	BA0181	500 mL	2-8℃ Protect From Light.	< 25℃ Protect From Light.	12 months
Immune Cell Serum-free Medium Supplement	BA0251	10 mL	2-8℃ Protect From Light.	< 25℃ Protect From Light.	12 months
OptiVitro® T Cell Serum-free Medium TE07 (phenol red-free)	**TE000-N081S**	**100 mL kit**	-	-	-
OptiVitro® T Cell Serum-free Basal Medium TE07 (phenol red-free)	BA0181S	100 mL	2-8℃ Protect From Light.	< 25℃ Protect From Light.	12 months
Immune Cell Serum-free Medium Supplement	BA0251S	2 mL	2-8℃ Protect From Light.	< 25℃ Protect From Light.	12 months

HANDLING RECOMMENDATIONS

1. Please make sure to store the cell culture medium in a light-protected environment, avoid fluorescent lamps or other lamplight exposure, and better to use colored packaging bags in the refrigerator or warehouse.
2. During the transportation of the product, it should be kept away from light. This is to prevent the product from being affected by the irradiation of fluorescent lamps or other light sources, which may lead to discoloration.
3. During the transportation of the product to the clean area, it is essential to carry out a cleaning process. The cleaning method may involve disinfectant wiping, and not utilize UV irradiation.

   Note: *When passing through transfer windows equipped with UV lamp, remember to proactively turn off the UV lamp inside the transfer window.*

INSTRUCTION FOR USE

Prepare media

1. Equilibrate OptiVitro® T Cell Serum-free Basal Medium TE07 (phenol red-free) and Immune Cell Serum-Free Medium Supplement to room temperature for 1-4 hours.
2. In a biosafety cabinet, add 20 mL/10 mL of supplement to every 1000 mL/500 mL of basal medium. Mix by inverting 3-5 times to obtain the complete OptiVitro® T Cell Serum-free Medium TE07 (phenol red-free).

Note:

1) Allow the basal medium and supplement to equilibrate to room temperature for 1-4 hours before mixing.
2) Once mixed, the medium can be stored at 2-8°C, protect from light, and should be used within two weeks.
3) A small amount of precipitation in the supplement when stored at 2-8°C is normal and does not affect usability. The precipitation will dissolve after 1-4 hours at room temperature.

Activation and Expansion of T Cells from PBMCs

1. Prepare fresh peripheral blood mononuclear cells (PBMCs) or rapidly thaw frozen vials in a 37°C water bath and transfer the cells into complete OptiVitro® T Cell Serum-free Medium TE07 (phenol red-free) to dilute the cryopreservation solution.
2. Centrifuge cells at 400×g for 10 minutes and remove the supernatant.
3. Equilibrate complete OptiVitro® T Cell Serum-free Medium TE07 (phenol red-free) to room temperature before use. Resuspend PBMCs at a concentration of 0.5-1×10^6 cells/mL in the complete OptiVitro® T Cell Serum-free Medium TE07 (phenol red-free) supplemented with cytokines such as IL-2, IL-7, or/with IL-15.
4. Transfer cells to culture plates pre-coated with anti-human CD3/CD28 antibodies or use beads for T-cell activation.
5. Incubate the cells in a humidified 37℃ incubator with 5% CO_2.
6. Feed and adjust the cell concentration to 0.5-1×10^6 cells/mL with complete medium supplemented with cytokines every 2-3 days. The cells can be transferred to bioreactors for further expansion at around Day7 post-activation.

DISCLAIMER

1. Use the product according to the manual instructions. Deviations from these instructions are at the user's risk, and our company will not be responsible for any resulting product performance deviations.
2. This product is for scientific research and commercial production only and is not intended for clinical diagnosis or treatment. Users assume all risks for unauthorized use, and our company shall not be responsible for any consequences.