

ExCell Bio

OptiVitro[®] Serum-free Cryopreservation Medium UC04

For Research and Manufacturing Use

Not Intended for Diagnostic and Therapeutic Use

User Manual

Catalog Number UC000-N056

Catalog Number UC000-N056S



| PRODUCT DESCRIPTION

OptiVibro® Serum-free Cryopreservation Medium UC04 is a ready-to-use medium designed for the cryopreservation of cells at ultra-low temperatures (–80 to –196°C). This medium offers a protective environment for cells and tissues, enhancing cell viability and functionality during the freezing, storage, and thawing processes. It is serum-free, protein-free, and devoid of animal components, making it ideal for a variety of cell types including PBMC, T cells, NK cells, and MSC.

Key Features:

- **Security:** Contains 7.5% (v/v) DMSO and is free from serum, protein, and heterologous components.
- **Simple:** Features a straightforward composition, facilitating clinical research and evaluation.
- **Efficient:** Suitable for cryopreserving immune cells like T and NK cells, as well as other cell lines such as hMSC, HEK293, Vero, and CHO.
- **Convenience:** Ready-to-use, eliminating the need for additional preparation.

| SPECIFICATION, STORAGE AND TRANSPORTATION

REQUIREMENT

Product Name	Cat.#	Specification	Storage	Transportation	Shelf Life
OptiVibro® Serum-free Cell Cryopreservation Medium UC04	UC000-N056	100 mL	2~8°C; Protect from Light	<25°C Protect from light	18 months
	UC000-N056S	8 mL	2~8°C; Protect from Light	<25°C Protect from light	18 months

| PERFORMANCE, APPLICATION AND HANDLING

RECOMMENDATIONS

1. Store the medium in a dark environment, preferably in colored packaging, to protect from light exposure.
2. Avoid prolonged exposure to lighting during transport to prevent discoloration.

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3. Implement cleaning and sterilization methods for transport to sterile areas; avoid UV sterilization.
 4. Turn off UV lamps when transferring through UV-sterilized windows.

| INSTRUCTION FOR USE

Cryopreservation

1. Assess and record cell viability before freezing. Collect cells in good growth status, centrifuge at 300g for 5 minutes, and discard the supernatant.
2. Resuspend cells in PBS, centrifuge, and discard the supernatant. (Washing is optional and can be done with OptiVibro® Serum-free Cryopreservation Medium UC04.)
3. Add OptiVibro® Serum-free Cryopreservation Medium UC04 according to the cryopreservation density and disperse cells evenly.
4. Transfer the cell suspension to cryovials, cap, and label.
5. Place cryovials in a programmed cooling box at -80°C overnight or for more than 6 hours.
6. Transfer cryovials to liquid nitrogen (-196°C) for long-term storage. (Resuscitate and identify cell state every 5-10 years.)

Thawing

1. Prepare a 37°C water bath and pre-warm cell culture medium.
2. Quickly transfer cryovials to the water bath, shake until ice is nearly melted (approximately 2-3 minutes).
3. Clean the cryovial with 75% alcohol, and transfer to a Bio-safety Cabinet.
4. Clean the cryovial again with 75% alcohol, open it, and gently mix the cell suspension with pre-warmed complete culture medium.
5. Centrifuge at 300g for 5 minutes, discard the supernatant, and resuspend the cells.
6. Count cells and calculate density, then seed into culture vessels as needed.

| DISCLAIMER

1. Use the product according to the manual instructions. Deviations from these instructions are at the user's risk.

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.