



Hi-viability™ Serum-Free Cell Freezing Medium

This product is only for research applications, not for diagnostic or therapeutic use.

Catalog Number: IF12008 Size: 50mL /100mL

Store at: 4°C or -20°C

Product description

Background:

Serum Free-Cell Freezing Medium (SF-CFM) is specifically designed for the cryopreservation of human and animal cells in vitro. It is sterile, powerful cryopreservation solutions optimized for enhanced performance across a broad range of cells. This product contains DMSO, glucose and other cell protectants to further increase the viability of cells during the cryopreservation process.

This product is chemically defined, animal component-free and protein free. It is also suitable for serum-free cultured cells and protein expressing cells.

Tested Applications:

Cryopreservation of cells, Human and Animal cells Freezing (Tumor cells and Ordinary cells)

Highlights:

- 1. Ready-to-use medium for the preservation of cells.
- 2. No dilutions required for use.
- 3. No programmable freezer system required,
- 4. Rapid and long-term freezing and preservation in a deep freezer (-80°C)
- 5. Serum-free
- 6. Protein-free
- 7. Animal component-free
- 8. Chemically defined

Storage Instruction:

Store at 4°C for at least 1 years, shipping at ambient temperature, for long term storage, please store at -20°C for at least 3 years. Not afraid of repeated freezing and thawing.

Troubleshooting Guide:

- 1. The cells frozen with this cryopreservation solution need to be put into the 86 $^{\circ}$ C refrigerator immediately, and the time of outside should be reduced.
- 2. For the cryopreservation of stem cells (ES cells), primary cell, etc., we recommend that the user conduct a trial cell cryopreservation culture of the product for at least 1

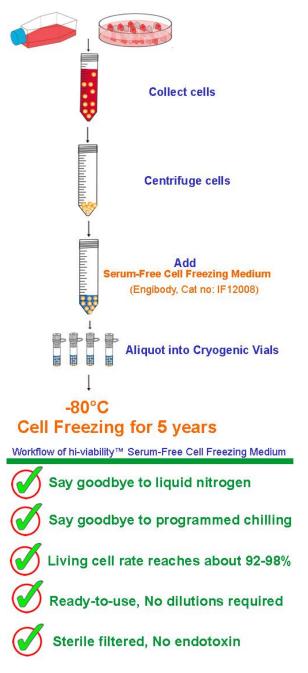




week on the cryopreserved cells before use, and then perform formal cryopreservation after confirming the performance.

- 3. This product contains 10% DMSO, and some cells are sensitive to DMSO. It is recommended to carry out the experimental cell cryopreservation culture of this product for at least 1 week, and then formally cryopreservation after confirming the performance.
- 4. For the precious cells without seed preservation, it is recommended to use the cryopreserved solution containing serum and carry out routine experiments at the same time to avoid unexpected situations such as cell death.

Work Flow Image







Application Figure











Procedure

A. Cell cryopreservation steps

- 1. Collect log-phase adherent cells or suspension cells in tubes by general methods.
- 2. Determine the required number of cryopreserved cells according to the density of the cultured cells and the size of the cryovial.
- 3. Put the required number of cell suspensions into a centrifuge tube, centrifuge at 1000 rpm for 5 minutes to collect the cultured cell pellet, and completely discard the supernatant in the centrifuge tube.
- 4. Add an appropriate amount of Hi-viability serum-free cell freezing medium to the centrifuge tube to make the cell concentration about 5×10⁵-1×10⁷/ml. Gently mix cells to make a cell mixture.
- 5. Dispense the cell mixture in the centrifuge tube into labeled cryopreservation tubes, 1ml or 1.5ml per tube is recommended.
- 6. Put the subpackaged cell cryopreservation tube directly into the -80 ultra-low temperature freezer, which can be frozen for a long time (more than about 5 years).

7(optional step). If you want to store in liquid nitrogen for a long time, you need to put it in a -80°C refrigerator for at least one day before moving it to a liquid nitrogen tank for storage.

B. Cryopreserved cell recovery steps

- 1. Get the frozen cells from the refrigerator and immediately place them in a 37°C water bath to quickly thaw them.
- 2. After the cell mixture in the cryovial is completely thawed, immediately add 1ml of cell culture medium into tube to mix with the cells, transfer the mixture to a centrifuge tube containing about 5ml of the cell culture medium, 1000rpm, 5 minutes. Collect the frozen cell pellet by centrifugation and discard the supernatant (be careful not to discard the cell pellet).
- 3. Add an appropriate amount of fresh cell culture medium, slowly add it to the cell pellet with a pipette, mix gently, and transfer the cell mixture to the prepared culture vessel.
- 4. After microscopic examination of the cells, the cells can be generally cultured according to the needs of their respective researches.



PRODUCT DATA SHEET

For research use only. Not for use in diagnostic or therapeutic procedures.

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