

Catalog No.	Name	Specification	Storage and Validity	Application
AC00869-0100	Serum-Free Cell Freezing Medium 2.0	100 ml	Cell Cryopreservation	Cell Cryopreservation

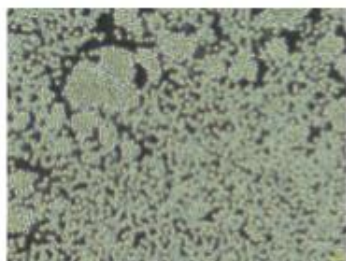
Serum-Free Cell Cryopreservation Solution 2.0

Product Datasheet

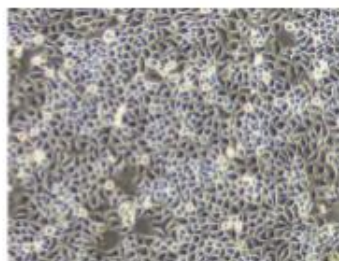
1. Product Description:

Serum-Free Cell Freezing Medium 2.0 is a serum-free, low-DMSO cell freezing medium containing 5% dimethyl sulfoxide (DMSO), which has low toxicity to cells. This product does not contain animal-derived proteins or serum, and the formula components are well-defined. It is suitable not only for conventional cell lines and primary cells, but also for serum-free cultured cells and protein expression cells.

This product does not require programmed cooling. The cell suspension can be directly mixed with the freezing medium and stored in a -80°C refrigerator. It is recommended to store at -80°C for 24 hours before placing it in liquid nitrogen for cryopreservation.



Raji cell recovery 72h cell growth state diagram



HeLa cell recovery 72h cell growth state map

2. Product Information:

Indicator	Parameter
Appearance	Acceptable
Osmotic pressure	> = 1500 mOsm/kg

pH value	7.4 – 8.1
Sterility	Negative
Endotoxin	< = 5.0 EU/mL
Storage conditions	-20 °C
Shelf life	36 months

3. Product Features

- a) Ready-to-use cell freezing medium
- b) No programmed cooling required, directly place in -80°C refrigerator, saving a lot of time and effort
- c) Serum-free, small batch-to-batch difference
- d) Low toxicity, dimethyl sulfoxide (DMSO) content is 5%
- e) High cell survival rate, suitable for cryopreservation of most mammalian cells

4. Protocol

Cell Cryopreservation

- a) Select adherent or suspension cells in the logarithmic growth phase (approximately 80%–90% confluency). Harvest the cells and prepare a single-cell suspension, then count the cells.
- b) Determine the number of cells to be frozen based on the cell density and the capacity of the cryovials.
- c) Centrifuge the cell suspension at 1000 rpm for 5 minutes and carefully discard the supernatant.
- d) Add Serum-Free Cell Freezing Medium 2.0 to the cell pellet, and gently resuspend to achieve a final cell density of 1×10^6 – 1×10^7 cells/mL.
- e) Dispense approximately 1 mL of the cell suspension into each cryovial and label them accordingly.
- f) Store the cryovials at -80°C for long-term preservation. For liquid nitrogen storage, keep the vials at -80°C for at least 24 hours before transferring them to liquid nitrogen for extended storage.

Cell Recovery

- a) Remove the frozen cells from the -80°C freezer or liquid nitrogen tank and quickly thaw them in a 37°C water bath, taking care to avoid contamination of the tube opening during handling.
- b) Once the cell suspension in the cryovial is completely thawed, immediately transfer it into a centrifuge tube containing approximately 5 mL of pre-warmed culture medium. Gently pipette to mix, centrifuge at 1000 rpm for 5 minutes, and discard the supernatant.
- c) Resuspend the cell pellet in an appropriate volume of complete culture medium. Seed the cells into a suitable culture vessel at the desired density, add fresh complete medium, gently swirl to distribute the cells evenly, and place the vessel in a 37°C incubator with saturated humidity for culture.
- d) Subsequent routine culturing should be performed as required by the experimental protocol or research objectives.

5. Precautions:

- For cryopreservation of primary embryonic stem cells, induced pluripotent stem (iPS) cells, or other valuable cell samples, it is recommended to perform a preliminary cryopreservation test for at least one week to verify cell viability and recovery performance before proceeding with large-scale storage.
- Serum-Free Cell Freezing Medium 2.0 contains 5% DMSO. For cell types that are particularly sensitive to DMSO, conduct a one-week test cryopreservation to confirm suitability prior to formal use.
- This product is sterilized through multiple 0.1 µm filtrations. Maintain strict aseptic techniques during use to prevent contamination.
- For personal safety, always wear a lab coat and disposable gloves when handling this product.
- This product is intended for research use only and must not be used for diagnostic, therapeutic, clinical, or any other medical purposes.

Disclaimer: For research use only, the company will not be responsible for any accidents caused by abnormal use of this product.