IMMUNOLOGICAL SCIENCES

ISL1711 - Cell Freezing Medium Serum/Protein-Free (without DMSO)

Colour: Transparent solution

Store: at 2-8℃

Validity: 12 months.

Product Information

Product Name	Cat. No.	Spec.
Cell Freezing Medium Serum/Protein-Free (without DMSO)	IS1711-100	100 mL
	IS1711-50	5×10 mL

Product Description

In order to preserve biological activity of the cells in vitro, they must be cryopreserved for a long time and then revived and cultured when necessary

Cell Freezing Medium Serum/Protein-Free (without DMSO) is a chemically defined, serum-free, protein-free, without DMSO ready-to-use non-gradient cryopreservation medium

This product is chemically defined and serum-free, which can effectively avoid the unstable results of serum batch instability and unknown composition on cell freezing.

Serum-free and protein-free, the potential effects of certain proteins on some specific cells can be avoided and applied to serum-free culture cells or expressed cells for cryopreservation.

DMSO-free, which **can effectively reduce the toxic effects of DMSO on cells.**

In addition, compared with traditional cryopreservation medium, this product take the non-gradient freezing, only need to resuspend the cells with this product and put them directly into -80℃ refrigerator, eliminating the operation of tedious gradient freezing**.**

This product guarantees freezing effect and optimizes the overall formulation, removal of DMSO as an intracellular protective agent to eliminate the toxic effect of DMSO on cells. Effectively improves viability and cell recovery after thawing. This product is universal for a wide range of cell cryopreservation, includes multiple types of **stem cell** cryopreservation.-80℃ refrigerator overnight, eliminating the operation of tedious gradient freezing.

This product has been continuously optimized and debugged by our technical team, and while it has the above advantages, it greatly weakens the crystallization process of water, protects cells from solute damage, and effectively improves viability and cell recovery after thawing. Suitable for multi-type, multi-source, and multi-purpose cell freezing.

Assay Protocols

Cell cryopreservation

1) Select cells in the logarithmic growth phase (approximately 90% confluence) and ensure that the medium is changed once within 24 hours before cryopreservation. Collect the cells and prepare them as a single-cell suspension (trypsin digestion may be required for adherent cells). Count the cells and ensure viability is greater than 90%.

2) Centrifuge the cell suspension at 800-1200 rpm for 5 minutes, and discard the supernatant.

3) Add Freezing Medium to the cell pellet, making the cell density 8x 10^6-5×10^6 cells/mL, and mix by gentle pipetting.

4) Aliquot the cell suspension into sterile cryovials in amounts of 0.5-1.0 mL, securely tighten the lids,and properly label the vials.

5) Immediately place the aliquoted cell cryovials into a -80°C ultra-low temperature freezer and ensure the stability of the ultra-low temperature freezer's temperature.

Cell Resuscitation

1) Preheat the water bath to 37°C, prepare clean disposable PE gloves, and add 9 mL of pre-warmed sterile culture medium to a sterile centrifuge tube.
2) Remove cells from the liquid nitrogen tank and place them into a PE glove, quickly immerse them in a 37°C water bath, and shake the cryovial to accelerate thawing, aiming for complete dissolution within one minute.
3) In the laminar flow hood, add the revived cell suspension to the centrifuge tube containing fresh medium, centrifuge at 1200 rpm for 3 minutes, and discard the supernatant after centrifugation.
4) Resuspend cells with an appropriate amount of complete medium corresponding to the cells,transfer them into a sterile container (culture flask or dish), add sufficient medium, and incubate in a cell culture incubator.

Note

1. Gently shake the reagent before use to ensure even distribution of each component.
2. Please use up the product within 3 months after opening, also can be divided and put in -20℃ for long-term storage.
3. Make sure the cells are in good condition before freezing, and make sure the corresponding markers are made on the cell cryotube. Use marker pen that are resistant to organic solvents to avoid loss of markers on the cell cryotube.
4. The product has a certain viscosity, recovery should not be centrifuged directly, it is recommended to dilute first and then centrifuged.
5. For your safety and health, please wear safety glasses, gloves or protective clothing.