CRYOSAVE I

DMEM/F12, 5% DMSO, Human Serum Albumin (USP), Amino Acids, Electrolytes

Catalog number: **136** (100 mL), **137** (500 mL), **184** (10 mL), **185** (50 mL)

Size: 10 mL, 50 mL, 100 mL and 500 mL

Intended Use:

For research purposes only.

Cryosave I is a cryo-preservation medium for freezing cells, ranging from mesenchymal stem cells, hepatocytes, other cell types to tissue sample, at -86ºC, and -196ºC.

Summary and Explanation:

Cryosave I is a ready-to-use and complete medium with no further additives required. The formula was improved with a reduction of DMSO (10%) and xeno-free. In Cryosave I, the fetal bovine serum is substituted for human serum albumin, minimizing the risk of xeno-immunization and zoonotic transmission.

Cryosave I maintains high cell viability on post-thawing, which is ideal for scientific research and research on technology transfer.

Known Applications:

Cryosave I demonstrates a cryopreservation efficiency, which results in a high survival rate of thawed cells, more than 85%, for mesenchymal stem cells derived from various sources, including adipose, umbilical cord tissue, and bone marrow.

Reagents Provided:

- 10 mL Cryosave I *or*
- 50 mL Cryosave I *or*
- 100 mL Cryosave I *or*
- 500 mL Cryosave I

Reconstitution, Dilution, and Mixing:

Directly resuspend cells in Cryosave I.

Cryosave I is provided at an 1x concentration to be added directly to cells without dilution. Dilution or mixing is not necessary.

Materials and Reagents Required But Not Provided:

Not applicable

Storage and Stability:

Stored at -20 to 4 ºC.

Shelf life at 12 months.

Instructions for Use:

Cell Freezing:

1. After harvesting, centrifuge cells at 1.500 rmp for 5 minutes.
2. Remove supernatant and resuspend in Washing Buffer for cell washing.
3. Re-centrifuge and collect cell pellets.
4. Resuspend cell pellet in cold Cryosave I (2-8 ºC) at a cell density of 1-2 .10^6 cells per mL. Mix thoroughly to achieve a homogeneous cell suspension.
5. Aliquot cell suspension into cryogenic vials.

Cooling:

- **6.1.** Freeze vials at -20ºC in 120 minutes; then transfer vials to -80ºC or -196ºC (liquid nitrogen for long-term storage). *or*
- **6.2.** Put cryogenic vials into cooling box for -1 ºC/min (for example, Mr. Frosty), transfer boxes to -86ºC overnight; finally transfer the vials to -196ºC (liquid nitrogen for long-term storage).

Thawing Cells:

1. Remove the cryogenic vials from storage.
2. Place vials into a 37°C water bath for 1-2 min.
3. Then transfer the vial into a laminar hood.
4. Transfer thawed cells into centrifuge tube containing Thawbest or media. Appropriate amount of Thawbest (ratio 1:4 Cryosave : Thawbest) or pre-warmed growth media into centrifuge tube (ratio 1:4 Cryosave : fresh cultured medium).
5. Centrifuge the cell suspension at 1.500 rmp for 5 minutes.

6. Discard the supernatant without disturbing the cell pallete.
7. Resuspend cells in Washing Buffer or growth medium according to the experimental design.

Limitations:

Non-injectable and non-transfusable.

Quality Control:

- pH: 7.0 - 8.0
- Bacterial and Fungal Contamination: Negative
- Mycoplasma: Negative.
- Endotoxin: < 1.0 EU/mL
- Colour: Yellow-Red
- Cell viability after thawing: ≥ 85%

Precautions:

Rapid or uncontrolled freezing may induce intracellular crystallization, which could affect the viability of thawed cells.

Post thawing, Cryosave I should be discarded, and cells should be washed before proceeding.

Personal protective equipment is required.

Troubleshooting:

Not applicable

Explanation of symbols and warnings

The symbols on produce labels are explained below:

			
Use By:	Batch code	Keep away from light	Catalog number
			
Temperature Limitation	Consult instructions for use	Caution, consult accompanying documents	Sterilized using aseptic processing techniques

Related products

Products	Catalog No.
Washing Buffer	
100 mL	149
500 mL	150
4 L (Bag)	151
Deattachment	
100 mL	120
500 mL	121
200 mL (Bag)	122
ThawBest	
100 mL	142
500 mL	143

To purchase other products, please visit:
http://biomedmart.org

For further information: Please contact us at:
contact@sci.edu.vn
sales@sci.edu.vn