

# CRYOSAVE II

Human Serum Albumin, 5% DMSO, Amino Acid and Electrolytes

## Catalog number: 138

**Size**: 100 mL

## Intended Use:

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

Post-thawed cells in Cryosave II can be injected locally into patients without removing the medium.

## Summary and Explanation:

Cryosave II is a ready-to-use and completed medium with no further additives required. With an advanced formula, Cryosave II contains 5% DMSO (U.S.P grade) and no animal proteins. This significantly eliminates the risk of xeno-immunisation and zoonotic transmission, enabling Cryosave II to be used for clinical purposes in the injection form. Further, Cryosave II can be stored and conveyed at room temperature.

Cryosave II maintains a high cell viability on thawing which is ideal for scientific research, research on technology transfer, clinical studies and especially for clinical uses.

#### Known Applications:

Cryosave II demonstrates 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:**

• 100 mL Cryosave II

#### **Reconstitution, Dilution and Mixing:**

Directly resuspend cells in Cryosave II.

Cryosave II is provided at an 1x concentration, to be added directly to cells. Dilution or mixing is not necessary.

# Materials and Reagents Required But Not Provided:

Not applicable.

#### **Storage and Stability:**

Stored at room temperature or 2-8 °C

Shelf life at 12 months.

## Instructions for Use:

#### Cell Freezing:

- 1. After harvesting, centrifuge cells at 250 x g for 5 minutes.
- 2. Remove supernatant and collect cell palette.
- 3. Resuspend cell palette in cold Cryosave II at cell density of 1-2 million cells per mL. Mix thoroughly to achieve a homogeneous cell suspension.
- 4. Aliquot cell suspension into cryogenic vials.

# Cooling:

**5.1.** Freeze vials at -20°C in 120 minutes; then transfer vials to -80°C or -196°C (liquid nitrogen for long-term storage). *or* 

**5.2.** Put cryogenic vials into cooling box for - 1 °C/min (for example, Mr. Frosty), transfer boxes to -86°C overnight; finally transfer the vials to -196°C (liquid nitrogen for long-term storage).

# Thawing Cells:

- Add an appropriate amount of Thawbest (ratio 1:4, Cryosave : Thawbest) or pre-warmed growth media into centrifuge tube.
- 2. Remove the cryogenic vial from storage. *Thaw:*

**3.2.** Place vial into a 37°C water bath until there is a small ice left in the vial. Transfer the vial into a laminar hood. *or* 

**3.3.** Transfer vial into a laminar hood. Slowly thaw cells.

- 4. Transfer thawed cells into centrifuge tube containing Thawbest or media.
- 5. Centrifuge the cell suspension at 1.500 rmp (250 x g) 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.

#### **Quality Control:**

- pH: 6.5-7.4
- Mycoplasma: < 0.9 RLU/s
- Endotoxin:  $\leq 1 \text{ EU/mL}$
- Colour: clear-yellow
- Sterile: Negative
- Cell viability after thawing: ≥ 80%
- Volume: 100(+1) mL

#### **Precautions:**

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

Personal protective equipment is required.

Do not use the product if the packaging is compromised or cracked and/or the media shows sign of microbial contamination and/or cloudy appearance.

#### **Troubleshooting:**

Not applicable

**References:** 

Not applicable

#### \*Note:

The usage of the post-thawed cells in Cryosave II in patients must be approved by Ministry of Health or Drug Administration.

This is not a drug. It has not been approved by Ministry of Health or Drug Administration as drug or medical devices.

Please contact us at <u>contact@sci.edu.vn</u> to get more information about this product.

#### Explanation of symbols and warnings

The symbols on produce labels are explained below:

MBAYYYY	LOT	淤	REF
Use By:	Batch code	Keep away from light	Catalog number
X	i	$\wedge$	STERILE A
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	
Deattachment		
100 mL	120	
500 mL	121	
ThawBest		
100 mL	142	

To purchase other products, please visit: <a href="http://biomedmart.org">http://biomedmart.org</a>

#### For further information: Please contact us at:

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