

## Cryopreservation Medium

**Product Name** Cryopreservation Medium

**Cat. No.** CS-SC-N1

**Packaging Specification** 100mL/Bottle

**Expected Use** For the cryopreservation of mesenchymal stem cells (MSCs) derived from various sources.

### Identity

<b>Appearance</b>	Colorless, pale yellow or yellow transparent liquid
<b>Sterility</b>	Sterile
<b>Endotoxin</b>	< 0.125 EU/mL
<b>pH</b>	7.2±0.5

### Product description

Based on the principle of ice-controlling technology for cell cryopreservation, this product is a ready-to-use cell cryopreservation medium with defined chemical composition, serum-free, DMSO free, protein-free and animal component-free.

**Main components** Cryoprotectants, inorganic salts, sugars, etc.

**Storage conditions and shelf life** 2-8°C, protect from light with a shelf life of 18 months.

### Instructions for use

This product is sterile and can be used directly without dilution. All cell culture procedures should be carried out in a sterile environment to prevent contamination.

### Cryopreservation

1. Digest the and collect cells to be frozen, centrifuge the cell ( $400 \times g$ , 5 minutes, RT) and remove the supernatant.
2. Resuspend cell pellet with proper solution (saline, culture medium or DPBS), followed by cell counting and cell survival rate detection. A viability of over 90% before cryopreservation is preferred. Then centrifuge ( $400 \times g$ , 5 minutes, RT) and remove the supernatant.
3. Resuspend cell pellet using the product to reach a cell density of  $1 \times 10^6$ - $2 \times 10^7$ /mL and a freezing volume of 0.5-1.5 mL/tube. If using a cryopreservation bag for large volume cryopreservation, please contact the technical team to obtain the programed cooling curve. Users can also add autologous plasma, serum, or HSA according to experimental needs to improve post-thaw viability.
4. Transfer the cryovial to a  $-80^\circ\text{C}$  freezer. If long-term freezing is required, transfer to liquid nitrogen after 12 hours.

### Thawing

1. After removing from liquid nitrogen, immediately immerse the cryovial into a  $37^\circ\text{C}$  water bath, stir to rapidly thaw the cells within 2 minutes.
2. Transfer thawed cells to a conical tube, slowly add 9 times volume of proper diluent.
3. Equilibrate by gently invert the tube for 10 times.
4. Centrifuge ( $400 \times g$ , 5 minutes, RT) and remove the supernatant.
5. Resuspend cell pellet with proper media/solution.
6. Perform cell count test if needed.
7. Proceed for downstream application.

### Viability test

Add thawed cells to 4 times the volume of complete culture medium, transfer to a centrifuge tube, and centrifuge for 5 minutes. Discard the supernatant, resuspend the cells using DPBS or complete culture medium, and then test the cell survival rate.

### Note

1. Upon receiving the product, please transfer it to a 2-8°C refrigerator for storage.
2. If the packaging is damaged, please contact our sales team immediately to replace the product.
3. This solution is expected to be handled by personnel who have received training in cell culture procedures.
4. If this product contains precipitate, turbidity or unclearly, do not use and contact sales team immediately.
5. To avoid contamination issues, please open the bottle cap in a sterile environment.

### Contact

Company Name: CellStore Biotechnology Co., Ltd.

Address: B201, Bldg. B6, No.66 Xixiaokou Rd., Haidian Dist., Beijing, China.

Phone: +86-10-8217-0580

Email: [marketing@cellstorebio.com](mailto:marketing@cellstorebio.com)

Website: [www.cellstore-global.com](http://www.cellstore-global.com)

### Effective date of the instruction manual

May 12<sup>th</sup>, 2025

Version: 01