

# Stem Cell Cryopreservation Solution

## Chemically Defined

### Product Description:

A chemically defined, serum-/xeno-/protein-free cell cryopreservation medium, featuring a uniquely optimized formulation for high-value cells including stem cells and induced pluripotent stem cells (iPSCs).

### Application :

Specifically formulated for cryopreservation of stem cells and high-value cells such as induced pluripotent stem cells (iPSCs).

### Product information:

F109-20: 20ml F109-100: 100ml

### Storage Conditions:

2-8°C, light protection recommended.

### Shelf Life: 3 years



### Features:

- Serum-free, animal-origin free, protein-free, and chemically defined formulation.
- Ready-to-use format requiring no programmed cooling - compatible with direct storage at -80°C or in liquid nitrogen.
- Manufactured under cGMP standards using **USP-grade** imported raw materials with advanced processing technology ensuring batch-to-batch consistency.
- Demonstrated to significantly improve post-thaw viability of stem cells, particularly iPSCs, with consistent recovery rates exceeding 90%.



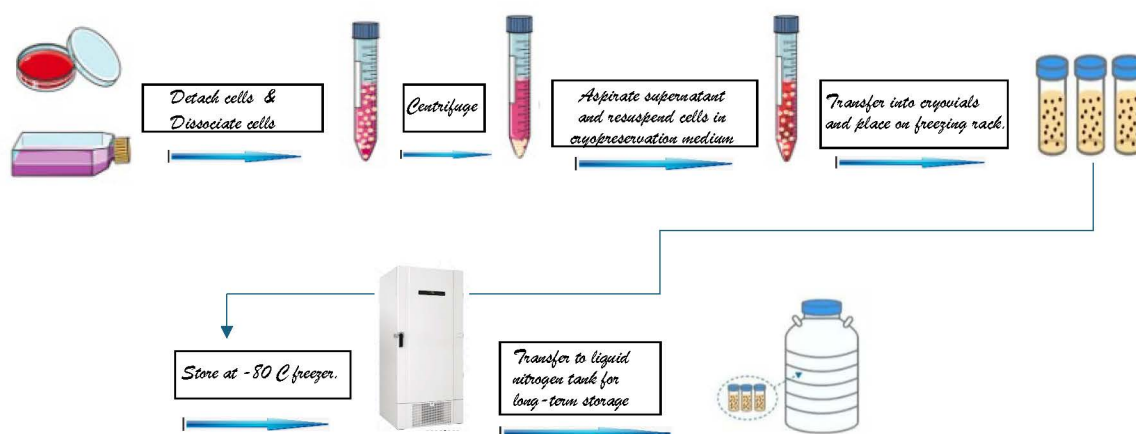
- ❖ After cryopreservation, minimize the time cells remain outside storage and promptly transfer them to a -80°C freezer for long-term preservation.
- ❖ Before transferring cryopreserved cells to liquid nitrogen, store them at -80°C for at least 24 hours.
- ❖ Avoid prolonged exposure of this product to room temperature, as it may reduce cryopreservation efficiency.

# Instruction for use

## I. Cell Cryopreservation:

1. Harvest cells in logarithmic growth phase. Wash once with 1X PBS or appropriate cell wash buffer.
2. Centrifuge to remove supernatant and perform cell counting.
3. Slowly add cryopreservation medium to achieve  $1 \times 10^6$ – $5 \times 10^6$  cells/ml. Gently resuspend cells and transfer to cryovials.
4. Place cryovials in a suitable freezing container (e.g., isopropanol-containing cryobox recommended). Incubate at 4°C for 15 minutes. \*→ *Critical: Ensures DMSO penetration into cells. Do not skip this step.*
5. Transfer to -80°C freezer for long-term storage.  
\*→ *For liquid nitrogen transfer, store at -80° C for ≥24 hours first.\**

The figure below is for reference:



## II. Cell Thawing:

1. Preheat 10 ml complete MSC medium at 37°C water bath for 15–20 minutes.
2. Retrieve cryovial from -80°C/liquid nitrogen. Thaw in 37°C water bath with gentle agitation until fully melted (no ice crystals), ~2 minutes.
3. Transfer cells to preheated complete medium. Centrifuge at 1,000–1,200 rpm for 5 minutes.
4. Discard supernatant. Resuspend in fresh preheated complete medium.
5. Proceed with standard MSC culture protocols.