



# **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 USPgrade 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.

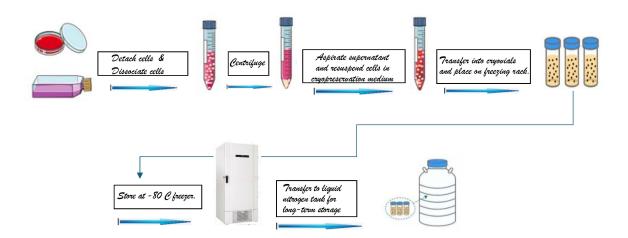


# Instruction for use

## 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.