Product Information

FreezeMe ZERO Primary
DMSO-free Cryopreservation Medium for Primary Immune and Stromal Cells
sterile-filtered
Cat. No. FMZP-50ML (50 ml), 5-FMZP-10ML (5 x 10 ml), FMZP-10ML (10 ml)

General Information

FreezeMe ZERO Primary is a fully chemically defined, DMSO-free cryopreservation medium developed for the reliable long-term storage of primary immune and stromal cells, including PBMCs, T cells, NK cells, MSCs. The formulation is specifically designed to preserve native cellular physiology during freeze–thaw cycles while avoiding transcriptomic, metabolic and epigenetic perturbations associated with dimethyl sulfoxide (DMSO).

By eliminating DMSO entirely, FreezeMe ZERO Primary minimizes freeze–thaw–induced molecular alterations and supports reproducible preservation of biologically relevant cell states essential for diagnostics, immunomonitoring and clinical research.

FreezeMe ZERO Primary enables robust post-thaw viability and rapid functional recovery without DMSO-induced activation artifacts. The serum-free, protein-free and animal component-free formulation reduces variability and simplifies documentation, making it particularly suitable for regulated diagnostic, clinical and biobanking workflows where sample integrity and data comparability are critical.

Applications

- Cryopreservation of primary human immune cells (PBMCs, T cells, NK cells)
- Cryopreservation of mesenchymal stem cells (MSCs) and other primary stem cell populations
- Diagnostic and blood cell banking strategies
- DMSO-free preservation strategies for sensitive cells

Product Specifications

Appearance	Clear solution
Specifications	- DMSO-free - Chemically defined - Serum-free - Animal derived component-free
Storage and Shelf Life	Store at +2°C to +8°C Protect from light.
Shipping Conditions	Ambient

Instructions for Use

General Notes:

- FreezeMe ZERO Primary is suitable for adherent and suspension cells. For freezing of adherent cell lines, detach the cells with a gentle dissolving reagent, such as Accutase (ACC-1B) and resuspend the cells in fresh culture medium
- Cell viability should be ideally > 90% before cryopreservation

Product Information

FreezeMe ZERO Primary
DMSO-free Cryopreservation Medium for Primary Immune and Stromal Cells
sterile-filtered
Cat. No. FMZP-50ML (50 ml), 5-FMZP-10ML (5 x 10 ml), FMZP-10ML (10 ml)

Cryopeservation of cells:

1. Collect the cells in a sterile tube and centrifuge for 5 min at 400 *x* g
2. Carefully remove the supernatant, resuspend in DPBS buffer (e.g. PBS-1A) and determine the cell count
3. Pellet for 5 min at 400 *x* g and resuspend in FreezeMe ZERO Primary
   Recommended cell density:
   For stem cells: 1 x 10^6 to 1 x 10^8 cells/ml
   For PBMCs, T cells, and NK cells: 1 x 10^6 to 2 x 10^7 cells/ml
4. Aliquot the cell suspension to a freezing volume of 0.5 – 1.5 ml. If freezing in larger volumes such as bags is intended, please use programmed cooling curves
5. Place the aliquots to a -80°C freezer. After 12 hours, transfer the aliquots to liquid nitrogen for long-term storage

Thawing of cryopreserved cells:

1. Immediately, after removing from liquid nitrogen, place the cryopreserved cells in a 37°C water bath and thaw cells rapidly for 2 min
2. Dilute the cells (1:10) to a conical tube with fresh, prewarmed culture medium
3. Invert 10 times to equilibrate
4. Centrifuge for 5 min at 400 x g and remove supernatant
5. Gently resuspend the cells in fresh medium and determine viability

Precautions and Disclaimer

This product is for research and further manufacturing use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Help Needed?

If you have any further questions regarding this product, please do not hesitate to contact our cell culture experts by email (techservice@capricorn-scientific.com) or phone (+49 6424 944640).