Product Information

FreezeMe ZERO
DMSO-free Cryopreservation Medium for Cell Lines
sterile-filtered
Cat. No. FMZ-50ML (50 ml), 5-FMZ-10ML (5 x 10 ml), FMZ-10ML (10 ml)

General Information

FreezeMe ZERO is a fully chemically defined, DMSO-free cryopreservation medium developed for reliable long-term storage of mammalian cell lines. The formulation is specifically designed to preserve cellular integrity during freeze–thaw cycles while avoiding transcriptomic, metabolic, and epigenetic perturbations associated with dimethyl sulfoxide (DMSO).

Unlike conventional cryopreservation media, FreezeMe ZERO eliminates DMSO entirely, thereby minimizing freeze–thaw-induced molecular alterations that may impact long-term cell line stability and performance. The medium supports high-density cryopreservation and enables robust post-thaw recovery, making it particularly suitable for the generation and storage of Master Cell Banks (MCBs).

Applications

- Cryopreservation of mammalian cell lines for Master and Working Cell Banks
- Long-term storage of production-relevant cell lines
- High-density cell banking workflows
- DMSO-free preservation strategies for sensitive cell lines

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 is suitable for adherent and suspension cell lines. 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

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 to reach a cell density of 1 x 10^6 to 1 x 10^8 cells/ml.

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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).