



User Manual

OriCell™ NCR Protein-Free Cryopreservation Medium

Cat. No. NCPF-10001



PRODUCT DESCRIPTION:

OriCell™ NCR (noncontrolled-rate) Protein-Free Cryopreservation Medium is a serum-free and ready-to-use freezing medium. Its chemically-defined and protein-free formulation has been optimized to stem cells and primary cells, thus greatly enhancing the viability and integrity of these cells by protecting them from damage during the one-step freeze-thaw procedure.

Unlike other conventional freezing media, which require a slow programmed freeze, our product allows the cells to be resuspended and put directly at -80°C .

This product is intended for laboratory research use only. It is not intended for diagnostic, therapeutic, clinical, household, or any other applications.

FEATURES:

- Stable and ready-to-use.
- Chemically-defined and protein-free.
- Promotes high cell viability (>90%) for most mammalian cells post-thaw.
- Maintain stem cell pluripotency.
- Does not affect the proliferation and differentiation properties of cells.
- Cells can be directly frozen at -80°C , thus eliminating the need for a programmed freeze.

PACKAGING:

Available in two sizes: 50 mL/Bottle

20 mL/Bottle

INSTRUCTIONS:

Cryopreservation

1. Collect cells that are in the logarithmic growth phase. Perform a cell count to determine the viable cell density.
2. Centrifuge the cells for 3-5 minutes at $250 \times g$ and 20°C . Remove and discard the

supernatant using a pipette.

3. Resuspend the cell pellet in the OriCell™ NCR Protein-Free Cryopreservation Medium at a cell density of 10^5 - 10^6 cells/mL.
4. Dispense aliquots of the cell suspension into cryogenic storage vials that are properly labeled.
5. Place the vials directly in a -80°C freezer. After 24 hours, transfer the frozen vials to liquid nitrogen for long-term preservation.

Thawing

1. Remove the cryovial of frozen cells from storage and quickly thaw the vial in a 37°C water bath.
2. Gently dilute and resuspend the cells in 8-10mL of cell culture medium.
3. Centrifuge the cells for 3-5 minutes at $250 \times g$ and 20°C
4. Carefully aspirate off as much of the supernatant as possible and add 2-3mL of cell culture medium to resuspend the cells.
5. Transfer the cells into an appropriate growth vessel with the appropriate amount of growth medium and incubate inside a 37°C incubator with a 5% CO_2 humidified atmosphere.

STABILITY AND STORAGE:

Store at 2 - 8°C . This product is stable at 2 - 8°C for up to 3 years and should be discarded beyond the labeled expiration date. For optimal performance, repeated warming and freeze-thawing should be avoided.

QUALITY CONTROL:

OriCell™ NCR (noncontrolled-rate) Protein-Free Cryopreservation Medium has been tested for performance on mesenchymal stem cells and Vero cells. The standard evaluation includes:

- Sterility test (bacteria, fungi and mycoplasma)
- pH test
- Osmolality

- Endotoxin

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