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User Manual

OriCell™ Neuron NCR Protein-Free Cryopreservation Medium

Cat. No. GUXNR-07021

PRODUCT DESCRIPTION:

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

Unlike other conventional freezing media, which require a slow programmed freeze, our product allows the cells to be resuspended and transferred directly to -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:

- Designed for neurons (hippocampal and cortical source)
- Promotes high cell viability (>70%) for neurons post-thaw
- Chemically-defined and protein-free.
- Stable and ready to use
- 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 *g at* 20°C. Remove and discard the

supernatant using a sterile pipette.

3. Resuspend the cell pellet in the OriCell Neuron NCR Protein-Free Cryopreservation Medium at a cell density of 105-106 cells/mL.
4. Dispense aliquots of the cell suspension into properly labeled cryogenic storage vials.
5. Place the vials directly into 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. Add 2mL of Neuron Growth Medium to a 15mL conical tube.
3. In a laminar flow hood, use a pipette to transfer 1ml Neuron Growth Medium to the vial, drop by drop, mixing by gently pipetting. Transfer the 2ml cell suspension to the conical tube containing Neuron Growth Medium drop by drop. Be careful not to introduce any bubbles during the transfer process.
4. Rinse the vial with 1mL of medium to reduce the loss of cells and then transfer the cell suspension to the conical tube.
5. Take a sample to count the viability of the cells and plate the cell suspension into the plate coated with poly-L-lysine/laminin by 1×10^5 viable cells/cm^2. Gently rock the culture plate to evenly distribute the cells.
6. Six hours later, change medium with fresh Neuron Growth Medium (pre-warmed to 37°C). And change half of the medium every third day or change medium every day if there are a lot of dead cells.

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™ Neuron NCR (noncontrolled-rate) Protein-Free Cryopreservation Medium has been tested for the ability to cryopreserve neurons.

The standard evaluation includes:

1. Sterility test (bacteria, fungi and mycoplasma)
2. pH test
3. Osmolality
4. Endotoxin