Product sheet

Freeze Medium CM-1 - 50 ml | 800050

Cytion's Freeze Medium CM-1 is a state-of-the-art cryopreservation medium designed to ensure the highest level of cell viability and functionality post-thaw. This versatile medium is suitable for a broad spectrum of cell types, including both human and animal cells, making it an essential tool for diverse research applications. Formulated with a meticulously balanced combination of cryoprotectants and essential nutrients, Freeze Medium CM-1 minimizes ice crystal formation and cellular stress during the freezing process, thus preserving cellular integrity.

Key features of Freeze Medium CM-1 include:

- **Broad Compatibility**: Effective for a wide range of cell types, including primary cells, stem cells, and established cell lines.
- **High Viability**: Optimized to maximize post-thaw cell recovery and viability, ensuring reliable experimental outcomes.
- **Ready-to-Use**: Conveniently prepared and sterilized for immediate application, reducing preparation time and risk of contamination.
- **Enhanced Stability**: Maintains consistent performance under standard cryopreservation conditions, ensuring reproducible results.
- **Long Shelf Life**: CM-1 is a serum-containing, ready-to-use cryopreservation medium that can be stored in the refrigerator for up to one year.

Using CM-1 for Freezing Cells

To use CM-1 for freezing both adherent and suspension cells, follow these steps:

- For adherent cells, wash and dissociate them from the culture substrate. For suspension cells, proceed directly to the next step.
- Count the cells to ensure they are at the proper concentration.
- Centrifuge the cells to pellet them, then resuspend in CM-1 freeze medium.
- Transfer the resuspended cells into cryovials.
- Use a slow-freezing method before transferring the cells to long-term storage.

Method	Description	Steps
Manual Freezing	A step-by-step method involving gradual temperature reduction to ensure cell viability.	1 Place cells in freeze medium in a 4°C freezer for 40 minutes. 2 Transfer to a -80°C freezer for 24 hours. 3 Store cells in liquid nitrogen for long-term preservation.
Using Mr. Frosty	A convenient device that allows for controlled freezing rates without electrical power.	1 Prepare cells in cryovials with freeze medium. 2 Place cryovials in Mr. Frosty container. 3 Store at -80°C for 24 hours before transferring to liquid nitrogen.
Controlled-Rate Freezer	A high-precision freezer by Thermo Fisher or other manufacturers designed for controlled temperature reduction.	1 Program the device to gradually decrease the temperature. 2 Place prepared cells in the freezer. 3 After the freezing cycle, transfer cells to liquid nitrogen.

- Store the cryovials at temperatures below -130°C or in liquid nitrogen for long-term preservation.

Ingredients

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- Contains FBS, DMSO, Glucose, Salts
- Buffering capacity: pH = 7.2 to 7.6

Cytion’s Freeze Medium CM-1 offers a reliable solution for cryopreservation, ensuring high cell viability and functionality post-thaw for a wide range of research applications.