Cell Freezing Medium (with Serum)

C1491281

Store at 2-8℃ short term (3 months). Store at -20℃ long term (12 months).

Introduction:

This product is a pre-sterilized, ready-to-use cryopreservation solution designed for the low-temperature freezing of cultured cells. After harvesting the cells to be preserved, simply add an appropriate amount of this solution and mix thoroughly—no additional preparation is required. It is highly convenient and suitable for cryopreserving most types of mammalian cells.

Features:

1. High Quality: Ensures cell resuscitation rates of over 90%.
2. Ease of Use: Stable storage at 2–8°C; no freezing required—ready to use directly.

Usage method:

1. Cell Freezing Procedure

1.1 Harvest adherent or suspension cells in the logarithmic growth phase and perform cell counting.

1.2 Transfer the cell suspension containing the desired number of cells into a centrifuge tube. Centrifuge to pellet the cells (recommended conditions: 1,000–2,000 rpm, 3–5 min). Carefully remove the supernatant.

1.3 Add an appropriate amount of cryopreservation solution to the tube and adjust the cell concentration to 1–5×10^6 cells/mL. Mix gently to prepare a uniform cell suspension.

1.4 Dispense the cell suspension into clearly labeled cryovials.

1.5 Place the cryovials in a device capable of controlled cooling (e.g., a programmed freezing container) and transfer to a -80°C freezer, ensuring a cooling rate of approximately 1°C/min. The cooling rate should generally not exceed 0.5°C/min.

1.6 For long-term storage in liquid nitrogen, transfer cryovials to a liquid nitrogen tank after overnight storage at -80°C.

2. Cell Thawing Procedure

2.1 Remove frozen cryovials and immediately thaw in a 37°C water bath with gentle agitation.

2.2 Once completely thawed, promptly transfer the cell mixture to a centrifuge tube containing 5mL of cell culture medium. Centrifuge to pellet cells (recommended conditions: 1,000–2,000 rpm, 3–5 min).

2.3 Carefully aspirate the supernatant. Resuspend the cell pellet in an appropriate amount of fresh culture medium with gentle mixing. Transfer the cell suspension to a pre-prepared culture vessel.

2.4 After microscopic examination, proceed with routine cell culture according to specific research requirements.

Matters needing attention:

1. Ensure the cryopreservation solution is completely thawed and gently mixed before use.
2. For long-term cell storage, transfer cryovials to a liquid nitrogen tank.
3. When cryopreserving stem cells or primary cells, it is recommended to perform a preliminary test using this product for at least one week to verify performance before formal cryopreservation.
4. To minimize the risk of cross-contamination, aliquot the product for repeated use.
5. This solution contains DMSO. Wear a lab coat and disposable gloves for safety.
6. For research use only.