

OMSSS Cell Cryoprotectant

OM626424

Description

OMSSS cell cryoprotectant is a new type protein-free cell freezing medium that allows cell cryopreservation directly at -80 °C without programmed freezer. It contains antifreeze polymers, and protein-free components from animals, which can effectively improve cell recovery, reduce the pollution of various viruses, molds and mycoplasma, ensure the safety of frozen cells, and meet the needs of most mammalian cells in vitro. OMSSS cell cryoprotectant does not contain DMSO component, reducing the toxic effect on cells. It also suitable for DMSO sensitive cells.

Advantages

- Ready-to-use with simple protocol ;
- Protein-Free, chemically defined ;
- DMSO-Free, reducing the toxic effect on cells;
- Quick freezing, cryopreservation directly at -80°C ;
- High cell viability (> 90%) ;

OMSSS cell cryoprotectant can be used to freeze most mammalian cells including :HEK-293 ,Hela ,A549 , NCI-H460 ,MCF-7, HepG2, SK-OV-3, C₂C₁₂ ,CHO ,COS7 ,DU145 ,MDCK ,NIH-3T3 ,HUVEC, HUSMC, BMSC , PC12 , and RAW264.7.

Cryopreservation

For optimum results, cells should be in mid-log phase of growth with >90% viability at the time of freezing.

1. Resuspend cells in complete medium at a sterile 15-mL centrifuge tube. (For adherent cells, gently detach cells from the substrate)
2. Centrifuge cell suspension at 100–200 × g for 5–10 minutes and aseptically decant supernatant.
3. Resuspend the cell pellet in OMSSS cell cryoprotectant at recommended viable cell density. (typically 1 × 10⁶ cells/mL or greater)
4. Dispense aliquots of cell suspension into cryovials according to the manufacturer's specifications (i.e., 1.5 mL in a 2-mL cryovial).
5. Transfer cryovials to -80 °C freezer immediately.

Recovery

1. Remove cells from cryo-storage and rapidly thaw (<1 minute) frozen vial in a 37°C water bath until only a small amount of ice remains.
2. Transfer cell suspension to a sterile 15-mL conical tube. Add, dropwise, the appropriate pre-warmed complete growth medium to a total volume of 10 mL. Ensure complete mixing with regular gentle swirling.
3. Centrifuge cell suspension at 100–200 × g for 5–10 minutes. Note: Centrifugation speed and duration may vary depending on cell type.
4. Aseptically decant supernatant without disturbing the cell pellet.
5. Gently resuspend cell pellet in an appropriate volume (e.g., 5 mL per 25 cm² surface area) of pre-warmed complete growth medium.
6. Transfer cell suspension to sterile culture vessel and place into the recommended culture environment.

Storage conditions

Store at 2–8 °C up to 12 months ; Store at -20 °C up to 24 months ;

Product use

For Research Use Only. Not for use in diagnostic procedures.

Notes

1. cells should be in mid-log phase of growth with >90% viability at the time of freezing;
2. After the freezing medium was added to the cells, please transfer it into - 80°C refrigerator for cryopreservation as soon as possible;
3. The cryopreserved cells can be stored in - 80°C refrigerator for more than 3 years; If cells need to be frozen for a long time, please transfer them to liquid nitrogen for storage;
4. For your safety and health, please wear experimental clothes and disposable gloves.

Catalog no.	Product	Size
OM626424	OMSSS Cell Cryoprotectant	50 mL
OM626424		100mL

Related products

Products	Components	Catalog no.
OMSCell Cryoprotectant	Serum-Free/5% DMSO	OM626422
OMSS Cell Cryoprotectant	Protein-Free/5% DMSO	OM626423
OMSSS Cell Cryoprotectant	Protein-Free/DMSO-Free	OM626424