Version 2，2025

User's Manual - MCP CryoSpr-DHQ 10(A)

【Product Type】: Cryoprotectant

【Product Name】: MCP CryoSpr-DHQ 10(A)

【Product Number】: CP004-1-50/100

【Packaging Specifications】: 50mL / bottle; 100mL / bottle

【Main Components】: Dimethyl sulfoxide (10%DMSO), sugars, inorganic salts and albumin, etc.

【Intended Use】: It is used for the preservation and transportation of various types of cells, such as peripheral blood mononuclear cells, hematopoietic stem cells, mesenchymal stem cells, immune cells (T, NK, DC, etc.), CHO, HEK293, 293T, Jurkat and K562, etc.

【Performance Index】:

Sterility: Negative (bacteria, fungi)	Endotoxin: <1 EU/mL
pH :6.0 ~ 8.0 (RT)	Osmolality: 1100 ~ 2500 mOsm/kg
Appearance: Light yellow clear liquid	

【Delivery Requirements】:

2 ~ 8℃, protected from light.

【Storage Conditions and Validity Period】:

2 ~ 8℃， protected from light. The validity period is 24 months.

【Usage Method】: For optimum results, please refer to the operating instructions as follow:

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1. Cryopreservation of cell samples

1.1. Prepare all consumables and reagents needed for sample cryopreserved: Cryogenic Vials/bags, pipettes, centrifuge tube, balanced salt solution (DPBS, HBSS and etc.) and MCP CryoSpr-DHQ10 (A) (pre-freezing at 4℃).

1.2. Suspense the cells into centrifuge tube which contain a certain volume of balanced salt solution(DPBS, HBSS and etc.), sampling and cell counting.

1.3. Centrifuge sample (300 ~ 700g, 5min, 4℃) to obtain cell pellet, remove the supernatant.

1.4. Slowly add CryoSpr-DHQ 10(A) into the cell pellet according to cell count and activity test results (0.5×10^6 ~ 1.0×10^7 /mL), gently mix. It is recommended to operate on ice or at 4℃.

1.5. Dispense the cell suspension into cryopreservation vials/bags and labeled the sample number, cell type, cell concentration, date, operator and other basic information.

1.6. Place the cryopreservation vials/bags containing the sample at 4°C for approximately 10 minutes.

1.7. Cryopreservation method:

① Place the cryopreservation vials/bags at -80°C, and can be transferred to liquid nitrogen temperatures for long-term storage (below -150°C) after 24 hours.

② Freeze follow a pre-set freezing program which has been validated by testings, and then transfer to liquid nitrogen temperatures for long-term storage(below -150°C).

【Suggestions】:

(1) In order to minimize the toxicity of Cryoprotectant to cells, please strictly control the operation temperature and total operation time.

(2) Sample storage at -80℃ is only recommended for short-term storage (weeks to months), for long-term storage please store samples at liquid nitrogen temperatures (below -150℃).

2. Thawing

2.1. Prepare all consumables and reagents needed for sample thawing: Pipettes, centrifuge tube, balanced salt solution (DPBS, HBSS and etc.) /complete cell culture medium (pre-freezing at 4℃).

2.2. The operator shall wear antifreeze protective gear, quickly remove the frozen sample from the storage location, and immediately thaw it into the 37℃ water bath/dry bath resuscitate equipment, remove the sample when it is about to melt completely (about 90%).

2.3. Immediately transfer the cell sample to the biosafety cabinet, add the balanced salt solution / complete cell culture medium (1:10 or higher. In order to avoid the cell damage caused by the rapid change of osmotic pressure, it should be added slowly at the beginning and gradually accelerated) to dilute rapidly and mix gently.

2.4. Centrifuge the sample (300 ~ 700g, 5min, 4℃) to obtain cell pellet, remove the supernatant.

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2.5. Gently resuspend cells with appropriate amount of balanced salt solution (DPBS, HBSS, and etc.) or complete cell culture medium, sampling and cell counting.

2.6. Use immediately or continue with further culture procedures according to the intended use.

【Suggestions】：

(1) For different samples, the optimal thawing time varies due to different freezing containers and volumes of sample, therefore when the sample is thawing, please check the changing of sample at all times.

(2) After the samples have been thawed, cryoprotectant should be dilute and remove as soon as possible.

【Precautions】：

1.This product is only for further manufacturing or research use only and is not intended for diagnostic and therapeutic use in humans or animals.

2.The product should be used immediately after opening or stored in separate packages, otherwise the product performance and cell freezing effect will be affected.

3.Before cryopreservation of cell samples, the experimental cell cryopreservation test should be conducted to confirm the performance before use.

4.The waste generated after use shall be treated in accordance with the relevant laws and regulations of the user's location, and shall not be discarded at will.

【Date of Instruction Manual approval and Modification】： 2025.11

【Technical Support】：

According to the terms of sales, please contact our technicians with any problems:

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