

TransStem® Peripheral Blood Mononuclear Cell Cryopreservation Medium—Protein Free (with DMSO)

Please read the manual carefully before use.

Cat. No. MC104

Storage: at 2-8°C in the dark for one year

Description

TransStem® Peripheral Blood Mononuclear Cell Cryopreservation Medium—Protein Free is a chemically defined, serum-free, protein-free, ready-to-use cryopreservation medium designed for PBMC. This product is suitable for long-term stable cryopreservation of mononuclear cells derived from peripheral blood and umbilical cord blood.

Features

- With 10% DMSO
- Completely using “pharmaceutical” grade materials
- Ultra-low endotoxin levels (< 0.1 EU/ml)
- Supports high-density cryopreservation of PBMC
- Supports programmed cryopreservation and direct cryopreservation at -80°C
- Validated cells frozen for 3 years with high cell recovery viability (> 90%)

Kit Content

Component	MC104-01
TransStem® Peripheral Blood Mononuclear Cell Cryopreservation Medium—Protein Free	100 ml

Procedures

1. Cell cryopreservation

- (1) Peripheral blood mononuclear cells (PBMCs) are isolated using Human Peripheral Blood Lymphocyte Separation Solution (TransGen, Cat: FB102).
- (2) Collect PBMC in a centrifuge tube, centrifuge at 300×g for 5 minutes, and discard the supernatant.
- (3) Add an appropriate amount of cryopreservation solution to make the cell density $2 \times 10^6 \sim 1 \times 10^8$ cells/ml ($5 \times 10^6 \sim 3 \times 10^7$ cells/ml is the recommended optimal density). Place cells into suspension.
- (4) Dispense the cell suspension in the centrifuge tube into the cryogenic vial. Freeze samples at -80°C directly or in freezing containers for long-term storage. (Store samples at liquid nitrogen only after samples have been frozen overnight at -80°C)

2. Cell recovery

- (1) Add 5-10 ml of complete medium pre-warmed at 37°C into a 15 ml centrifuge tube.
- (2) Take out the cryogenic vial from the -80°C refrigerator or liquid nitrogen, and quickly thaw it in a 37°C water bath or cell resuscitation equipment until all visible ice has melted.
- (3) Transfer the cell suspension in the cryogenic vial dropwise to the pre-prepared complete medium, mix gently, centrifuge at 300×g for 5 minutes, and discard the supernatant.
- (4) Add an appropriate amount of preheated complete medium, pipet gently to mix, transfer to a culture vessel, and put it in an incubator (37°C, 5% CO₂).



Notes

- Please make sure that the cells grow well before cryopreservation, and the survival rate is greater than 90%, such as cells in the logarithmic growth phase.
- We recommend that users perform a pre-experiment on the frozen cells for at least 1 week before using this product, and then perform formal freezing after confirming the performance.
- This product is in sterile packaging and does not need to be filtered. Please be aware of using it under sterile conditions.
- Please ensure that the cell cryogenic vial is completely sealed to avoid bursting of the cryogenic vial during the resuscitation process.
- Please wear lab gown and wear antifreeze gloves for operation to avoid low temperature frostbite.

For research use only, not for clinical diagnosis

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