

# STEM-CELLBANKER® DMSO FREE

## Cryopreservation Medium

- Serum-Free
- Chemically Defined
- GMP Manufactured



Cat#: 11890F

Qty: 100ml

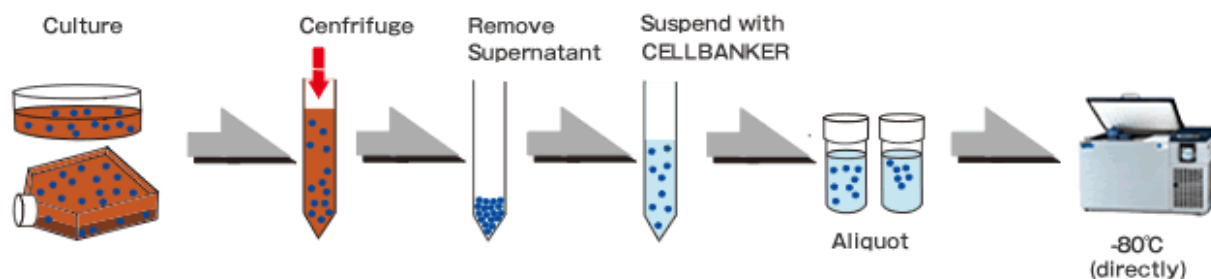
Expiry Date: 3 years from manufacturing date (see label)

## Cell Freezing:

For optimum results, cells for cryopreservation should be in log phase of growth. Similar or standard freezing protocols may be substituted.

1. Examine and make sure the cell culture is free of contamination, in healthy situation and proper confluency, etc.
2. Perform a cell count to determine the viability of cells
3. Gently pellet the cells by centrifugation (3 - 5 minutes at 1,000-2,000rpm, 4°C). Remove the supernatant by using an aspirator.
4. Gently suspend the cells with STEM-CELLBANKER® cryopreservation medium (1 ml for  $5 \times 10^5$  -  $5 \times 10^6$  cells).
5. Dispense the cell suspension in 1ml aliquots to cryopreservation vials that have been labeled with the cell line name, cell concentration, passage date and other essential information.
6. Place the vials directly in a -80°C for storage. If necessary, transfer the frozen vials to a liquid nitrogen storage tank after the vials have been frozen for at least 24 hours.
7. Optimum protocol may change with the cell types.

## Procedure for Use:



## Thawing:

1. Remove the frozen cell from storage and quickly thaw in a 37°C shaking water bath.
2. Immediately dilute and gently mix each 1ml of cells with 10ml of complete cell culture medium.
3. Gently pellet the cells by centrifugation (3-5 minutes at 1,000 - 2,000rpm, 4°C). Remove the supernatant by aspirator.
4. Gently suspend the cells with appropriate volume of complete cell culture medium and plate in a culture flask.
5. Continue the further culture procedures according to standard protocols.

## Guarantee of Quality:

1. Manufactured in compliance with JPN, EU, US, and PIC/S GMP guidelines
2. Bacterial contamination free - Product has been tested and confirmed to be free of bacteria, fungi and mycoplasma.
3. Chemical Analysis: pH (7.0 to 8.5 at room temperature) Endotoxin (below <5 EU/mL)
4. Performance test - Cell viability above 80% (JM404, SK-007) is guaranteed.

## Storage of STEM-CELLBANKER®:

1. STEM-CELLBANKER® should be stored at 4°C or below.
2. Keep frozen in case of long term unused period (3 months or longer)
3. Repeated freezing and thawing may impair the quality of the product; it is recommended that STEM-CELLBANKER® is aliquoted before freezing.

## References:

Miki T *et al.* (2016) Biological impact of xeno-free chemically defined cryopreservation medium on amniotic epithelial cells *Stem Cell Research & Therapy* 2016 Jan 12;7:8

Yamanaka S *et al.* (2014) A novel efficient feeder-free culture system for the derivation of human induced pluripotent stem cells. *Scientific Reports* 4 Article, number:359

Holm *et al.* (2010) An effective serum- and xeno-free chemically defined freezing procedure for human embryonic and induced pluripotent stem cells. *Hum Reprod.* 25(5):1271-9. Epub 2010 Mar 5.

## Product Range:

Description	Pack Size
CELLBANKER® 1 - Serum Containing	20 ml
CELLBANKER® 1 - Serum Containing	4 x 20 ml
CELLBANKER® 1 - Serum Containing	100 ml
CELLBANKER® 2 - Serum Free	20 ml
CELLBANKER® 2 - Serum Free	4 x 20 ml
CELLBANKER® 2 - Serum Free	100 ml
STEM-CELLBANKER® - GMP	20 ml
STEM-CELLBANKER® - GMP	4 x 20 ml
STEM-CELLBANKER® - GMP	100 ml
STEM-CELLBANKER® - GMP - DMSO Free	20 ml
STEM-CELLBANKER® - GMP - DMSO Free	4 x 20 ml
STEM-CELLBANKER® - GMP - DMSO Free	100 ml
CELLOTION cell wash solution	100 ml

## Cells Tested:

Cell type	Description	Post Thaw Cell Viability
201B7	Human iPS cell	90
129SV	Mouse ES cell	90
P3/x63-Ag8.U1	Murine myeloma cell	90
2D-8	Murine hybridoma	90
YAC-1	Murine lymphoblast	90
NBM-Lu	Normal newborn murine fibroblast cell line	90
Feline PBMC	Feline peripheral blood mononuclear cells	80
Canine PBMC	Canine peripheral blood mononuclear cells	90
Jurkat	Human T-cell line	80
SK007	Human B-cell line	90
K562	Human Caucasian chronic myelogenous leukaemia cells	90
HeLa	Human uterine cervical carcinoma cell	90
HepG2	Human hepatocellular carcinoma cells	90
Caco-2	Human colonic adenocarcinoma cells	90
UE6E7-16	Human Mesenchymal cells	90
UE7T-13	Human Mesenchymal stem cells	90