

# CELLBANKER<sup>®</sup> 2

## Cryopreservation Medium (Serum Free)

Cat # 11891

Qty: 100ml

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



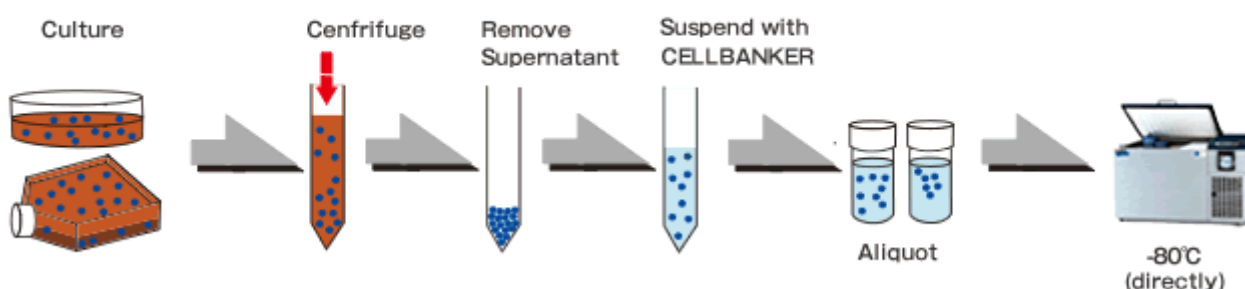
### Cell Freezing:

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 CELLBANKER<sup>®</sup> 2 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.

**IMPORTANT:** 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. Bacterial contamination free - Product has been tested and confirmed to be free of bacteria, fungi and mycoplasma.
2. Chemical Analysis: pH (7.0 to 8.5 at room temperature) Endotoxin (<5 EU/mL)
3. Performance test - Cell viability above 80% (JM404, SK-007) is guaranteed.

## Storage of CELLBANKER® 2:

1. CELLBANKER® 2 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 CELLBANKER® 2 is aliquoted before freezing.

## Precautions:

1. For research use only
2. Not for clinical or diagnostic use.
3. Performance of trial tests using cells of intended use before experiments is recommended.

## References:

Bagley, J. A. *et al.* (2017) Fused cerebral organoids model interactions between brain regions. *Nature Methods*. doi:10.1038/nmeth.4304

## 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

## Cell Types Tested:

Cell type	Description
293	Sheared human Ad5 DNA-transformed cell line.
293T	Human cell line expressing SV40 large T antigen
32D	Murine myeloid cell
3LL	Murine Lewis lung cancer cell
A10	Thoracic aortic smooth muscle of an embryonic rat
A2781	Glioblastoma cell
Ac2F	Rat liver cell
AtT20	Murine anterior pituitary cell
Ba/F3	Murine Pro-B cell
BHK-21	Baby Hamster renal fibroblast cell
C2C12	Mouse myoblast cell
C3H10T1/2	Murine embryonic fibroblast cell
Caco-2	Human colonic adenocarcinoma cell
CHL/1U	Neonatal Chinese Hamster Lung cell
CHO	Chinese Hamster Ovary cell
CHO-K1	Chinese Hamster Ovary cell
Colo203	Human colonic adenocarcinoma cell
COS1	African green monkey kidney cell
COS7	African green monkey kidney cell
CTLL-2	Murine T-cell
DLP-1	Human colonic adenocarcinoma cell
DT40	Chicken B lymphocyte cell
DU145	Human prostate carcinoma cell
<b>EBV transformed B cell</b>	
EJ-1	Human bladder carcinoma
ELM-D	Murine erythroblastic leukemia cell
HeLa cell	Human Uterine Cervical Carcinoma Cell
Hep3B	Human hepatoma cell
Hepal-6	Murine hepatoma cell
<b>Hepatocyte</b>	
HepG2	Hepatocellular carcinoma cell
HL-60	Human promyelocytic leukemia cell
HT-2	Murine cell
Huh-7	Human hepatocarcinoma cell
Jurkat	Human T-cell line
K-562	Human Caucasian Chronic myelogenous leukaemia cell
Kato-III	Human stomach carcinoma
<b>Keratinocyte</b>	
KM12-LX	Human Caucasian Chronic myelogenous leukaemia cell
L5178Y	Murine lymphoma cell
L929	Murine fibroblast cell
LM	Murine fibroblast cell
LNcap	Human prostate adenocarcinoma cell
<b>Lymphocyte</b>	
MCF-7	Human metastatic mammary carcinoma cell
MDCK	Madin-Darby canine kidney cell
<b>Microvascular Endothelial Cell</b>	
Molt-4	Human T-cell
NB-1/GOTO	Human neuroblastoma
NCI-H441	Human lung adenocarcinoma epithelial cell
NIH3T3	Mouse embryonic fibroblast cell

P388	Murine leukemia cell
P3/x63-Ag8.U1	Murine myeloma cell
PC12	Rat pheochromocytoma cell
<b>Periodontal ligament fibroblast cell</b>	
<b>Periodontal ligament membrane fibroblast cell</b>	
Raji	Human B-cell line
RAW264.7	Murine Macrophage cell
sf9	Insect cell
SK-N-MC	Neuroepithelioma cell
SN12C	Renal carcinoma cell. Subclone: PM6, Clone8, MM3
<b>Stomach carcinoma cell</b>	
THle3	Human liver cell
T24	Human bladder carcinoma
Vero	African green monkey kidney epithelial cell
WEHI3B	Murine myeloid leukemia
WiDr	Human colon adenocarcinoma cell

## Typical Experimental Results:

Cell Type	Preservation period (year)	Viability of cells (%)	
		-80°C	-196°C
<b>Mouse</b>			
Hybridoma	10	95	95
Myeloma	10	90	90
L929	10	90	90
FM3A	5	90	90
BALB/3T3	5	90	90
M1	5	90	90
YAC-1	5	90	-
<b>Rat</b>			
RLC-16	5	90	90
NRK	5	90	90
PC-12	5	90	-
<b>Hamster</b>			
CHO	5	90	90
V79	5	90	90
<b>Monkey</b>			
COS-1	5	90	90
Vero	5	90	90
<b>Human</b>			
Kidney-derived tumor cell	5	90	90
EBV transformed cell	5	90	90
HEL-derived fibroblast	5	90	90
Melanoma	5	90	90
Caco-2	3	90	-
C-5	5	90	90
CEM	5	90	90
K562	10	90	90
Jurkat	10	90	90
BALL-1	5	90	90
HUC-Fm	5	80	80