CELLBANKER® 1

Cryopreservation Medium (Containing Serum)

****For Research Use Only****

Manufactured By

ZENOGEN PHARMA CO., LTD.

Cat# 11910 (100mL), 11911 (25mL)
Storage Temperature: 2 to 8°C or below -20°C.
Expiry Date: 3 years from manufacturing date (see label)
Manufactured By: Zenogen Pharma Co., Ltd

Protocol:

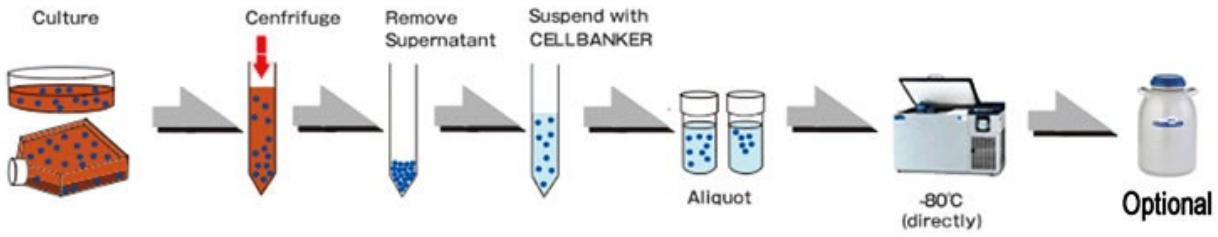
Freezing

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

1. Examine and make sure the cell culture is free of contamination, in healthy and at proper confluency.
2. Perform a cell count to determine the viability of cells.
3. Centrifuge at 1,000 - 2,000 rpm, 4°C for 3 to 5 minutes to gently pellet the cells. Remove the supernatant with an aspirator.
4. Gently suspend CELLBANKER® 1 cryopreservation medium (1 mL for 5×10^5 - 5×10^6 cells).
5. Transfer 1 mL of the cell suspension to cryopreservation vial labeled with appropriate information (the cell line name, concentration, passage date etc.).
6. Place the vials directly in -80°C for storage.
7. **(OPTIONAL)** Transfer the frozen vials to a liquid nitrogen storage tank after the vials have been frozen for at least 24 hours.

IMPORTANT: Optimum protocol may change with the cell types.

Procedure for Use:



Distributed By:

Iwai North America Inc.

URL: www.iwaichem.com
Email: orders@iwai-chem.com
Tel: 650-486-1541

Thawing

1. Remove the cryopreservation vial from the freezer and quickly thaw cells in a 37°C shaking water bath or shake by hand.
2. Transfer the content to a centrifugation tube then immediately dilute and gently mix with 10mL of complete cell culture medium**. Using CELLOTION® instead of complete culture medium will prevent adhesion of cells to the wall of the tube, increasing the recovery rate.**
3. Centrifuge cells at 1,000 - 2,000 rpm, 4°C for 3 to 5 minutes. Remove the supernatant with an aspirator.
4. Gently resuspend the cells with appropriate volume of complete cell culture medium then plate in a culture flask or plate.
5. Continue the culture procedures according to standard protocols.

Cells Tested (Check website for updated list)

Typical Experimental Results:

Cells	Preservation period (year)	Viability of cells (%)	
		Preserved at -80℃	preserved at -196℃
MOUSE			
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	-
RAT			
RLC-16	5	90	90
NRK	5	90	90
PC-12	5	90	-
HAMSTER			
CHO	5	90	90
V79	5	90	90
MONKEY			
COS-1	5	90	90
Vero	5	90	90
HUMAN			

Distributed By:

Iwai North America Inc.

URL: www.iwaichem.com
Email: orders@iwai-chem.com
Tel: 650-486-1541

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

References

Hwang, Y. S. et al. Reconstitution of prospermatogonial specification in vitro from human induced pluripotent stem cells. Nature Communications 11, 5656 (2020) doi: 10.1038/s41467-020-19350-3.

Lee, H.-O. et al. Lineage-dependent gene expression programs influence the immune landscape of colorectal cancer. Nature Genetics 52, 594–603 (2020) doi: 10.1038/s41588-020-0636-z.

Wang, Z. et al. mRNA vaccine-elicited antibodies to SARS-CoV-2 and circulating variants. Nature 592, 616–622 (2021) doi: 10.1038/s41586-021-03324-6.

Shinozawa, T. et al. High-Fidelity Drug-Induced Liver Injury Screen Using Human Pluripotent Stem Cell–Derived Organoids. Gastroenterology 160, 831-846.e10 (2021) doi: 10.1053/j.gastro.2020.10.002.

Parajuli, B. et al. Transnasal transplantation of human induced pluripotent stem cell-derived microglia to the brain of immunocompetent mice. Glia 69, 2332–2348 (2021) doi: 10.1002/glia.23985.

Oguri, S. et al. Effect of varying storage conditions on diagnostic test outcomes of SARS-CoV-2. J Infect 83, 119–145 (2021) doi: 10.1016/j.jinf.2021.03.026.

Yoshida, J. et al. Mitochondrial complex I inhibitors suppress tumor growth through concomitant acidification of the intra- and extracellular environment. iScience 24, 103497 (2021) doi: 10.1016/j.isci.2021.103497.

Ordering Details:

Iwai North America Inc.

Online: www.iwaichem.com

Email: orders@iwai-chem.com

Distributed By:

Iwai North America Inc.

URL: www.iwaichem.com
Email: orders@iwai-chem.com
Tel: 650-486-1541