STEM-CELLBANKER® EX GMP Grade (Chemically defined cryopreservation solution) **For Research Use Only** Manufactured By ZENOGEN PHARMA CO., LTD.

Cat#: 11936 Size: 100mL 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 STEM-CELLBANKER® EX cryopreservation medium (1 mL for 5×10⁵ 5×10⁶ 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.

Distributed By:



URL: <u>www.iwaichem.com</u> Email: <u>orders@iwai-chem.com</u> Tel: 650-486-1541 Procedure for Use:



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. Click Here)

Cell type	Products	Contributor
Adipose-Derived Stromal/Stem Cells (ADSC)	STEM-CELLBANKER® EX GMP grade	EMO Biomedicine
Cord blood derived hematopoietic stem cells	HSC-BANKER® GMP grade	The Japan society for Hematopoietic cell transplantation (2015)

References:

Mizui, T., Chen, H., Lee, S. & Fukui, M. Study on cryopreservation of human adipose-derived stromal cells. Cytotherapy 23, S60–S61 (2021) doi: 10.1016/S1465324921003546.

Distributed By:



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

Disclaimer:

STEM-CELLBANKER® EX GMP grade is not itself a pharmaceutical. Therefore, no warranty, express or implied, as to the fitness and suitability of this product for any particular purpose and/or merchantability unless the use is intended for research.



Iwai North America Inc.

Online: www.iwaichem.com

Email: orders@iwai-chem.com

Distributed By:



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