6042 Cornerstone Court W, Ste B
San Diego, CA 92121
Tel: 1.858.829.3082
Fax: 1.858.481.8694
Email: info@bpsbioscience.com

Cell Freezing Medium

Catalog #: 79796-1
50 ml

Description

Cryopreservation is a cornerstone of cell biology, and is essential to maintaining healthy and reliable cell lines. BPS Bioscience Cell Freezing Medium is optimized for maximum viability and rapid recovery of all BPS Bioscience Cell Lines. This product contains DMSO. It is provided sterile-filtered and mycoplasma-free for the protection of the samples.

Application

- Cryopreservation of mammalian cell lines

Quality

Sterile filtered (0.2 µm) and Mycoplasma-free. All components are low endotoxin. Serum is ISIA-certified and sourced from the United States of America.

Storage and Stability

Store in aliquots at -20°C for up to 1 year. Avoid freeze/thaw cycles. Thaw overnight at 4°C before use. Hygroscopic; avoid moisture.

Cell Freezing Protocol

1. If using adherent cells, rinse with phosphate buffered saline (PBS), and detach cells from culture vessel with 0.25% Trypsin/EDTA. Add growth medium to neutralize trypsin, and transfer to a conical tube.
2. Mix cells well by pipetting. Take a sample of the cells in a microcentrifuge tube, and count the number of viable cells by trypan blue staining. Calculate the number of cells available for freezing.

   Note: For best results, cells should be at least 80% viable and preferably >90% viable before freezing, and in healthy log-phase growth, not overgrown.
3. Transfer cells from growth flask to a conical tube, and spin down cells for 5 minutes. Resuspend in 4°C BPS Bioscience Freezing Medium at ~2 x 10^6 cells/ml.
4. Dispense 1 ml of cell aliquots into cryogenic vials. Place vials in an insulated container for slow cooling (-0.5°C to -1°C per minute) and freeze at -80°C overnight.
5. Transfer the cells to liquid nitrogen the next day for long term storage.

   Note: It is recommended to expand cells and freeze down more than 10 vials of cells for future use at an early passage.

6042 Cornerstone Court W, Ste B
San Diego, CA 92121
Tel: 1.858.829.3082
Fax: 1.858.481.8694
Email: info@bpsbioscience.com

Cell Thawing Protocol

1. Remove cells from liquid nitrogen storage and immediately put the vials on dry ice before thawing.
2. Warm Thaw Medium in a 37°C water-bath until temperature equalizes. (See cell line datasheet for medium recipes*)
3. Thaw the frozen cells from dry ice in a 37°C water-bath for 40 seconds, until freezing medium is partially thawed but with some ice remaining.
4. Transfer the entire contents of the cell vial to a conical tube containing 10 ml of pre-warmed Thaw Medium.
5. Spin down the cells for 5 minutes, remove the supernatant, and resuspend the cells in 5 ml of pre-warmed Thaw Medium.
6. Using a pipette, gently transfer the resuspended cells to a T25 flask and incubate at 37°C in a 5% CO_2 incubator.
7. After 24 hours of culture, change to fresh Thaw Medium for adherent cells, or add an additional 3-4 ml of Thaw Medium to suspension cells.
8. After cells reach relatively appropriate density, passage the cells using the protocol in the datasheet, and begin using selective antibiotics or Growth Medium.

**Note: Thaw Medium does not contain selective antibiotics (G418, Hygromycin, Puromycin, etc.) because these can be too harsh on the recently thawed cells. We recommend that the selection be added back to cells after cells have recovered fully.*

Related Products

Product name	Catalog#	Size
Cell Staining Buffer	79795	500 ml
ONE-Step™ Luciferase Assay System	60690-1	10 ml
ONE-Step™ Luciferase Assay System	60690-2	100 ml
Dual Luciferase (Firefly-Renilla) Assay System	60683-1	10 ml
Dual Luciferase (Firefly-Renilla) Assay System	60683-2	100 ml
Thaw Medium 1	60187-1	100 ml
Thaw Medium 2	60184-1	100 ml
Thaw Medium 3	60186-1	100 ml
Growth Medium 1A	79528	500 ml
Growth Medium 2A	60190	500 ml
Growth Medium 3A	60188	500 ml