

# Recovery™ Cell Culture Freezing Medium

## Description

Recovery™ Cell Culture Freezing Medium is a complete ready-to-use cryopreservation medium with proven performance on a broad spectrum of mammalian cell lines. Recovery™ Cell Culture Freezing Medium is a proprietary formulation based on Dulbecco's Modified Eagle Medium (High Glucose) with optimized levels of fetal bovine serum, bovine serum and DMSO (10%) providing improved viability and cell recovery after thawing.

Product	Catalog no.	Amount	Storage	Shelf life*
Recovery™ Cell Culture Freezing Medium, liquid	12648-010	50 mL	-20°C to -5°C	12 months

\*Shelf life duration is determined from Date of Manufacture.

## Product use

For Research Use Only. Not for use in diagnostic procedures.

## Safety information

Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves.

## Cryopreservation

For optimum results, cells should be in mid-log phase of growth with >90% viability at the time of freezing. Similar protocols may be substituted.

1. Thaw Recovery™ Cell Culture Freezing Medium, mix well and keep at 2°C to 8°C until use.
2. For suspension cells proceed to step 3. For adherent cells, gently detach cells from the substrate on which they are growing using a suitable dissociation reagent such as TrypLE™. Resuspend cells in complete medium required for that cell type.
3. Transfer cell suspension to a sterile 15-mL centrifuge tube.
4. Determine the viable cell density and percent viability using a Countess® Automated Cell Counter (similar automated or manual methods may be used) and calculate the required volume of Recovery™ Cell Culture Freezing Medium to give a final cell density of  $1 \times 10^6$  to  $1 \times 10^7$  cells/mL.
5. Centrifuge cell suspension at  $100\text{--}200 \times g$  for 5–10 minutes. Aseptically decant supernatant without disturbing the cell pellet.  
**Note:** Centrifugation speed and duration may vary depending on cell type.
6. Resuspend the cell pellet in (2°C to 8°C) chilled Recovery™ Cell Culture Freezing Medium at recommended viable cell density for specific cell type (typically  $1 \times 10^6$  cells/mL or greater).
7. Dispense aliquots of cell suspension (mix frequently to maintain a homogeneous cell suspension) into cryovials according to the manufacturer's specifications (i.e., 1.5 mL in a 2-mL cryovial).
8. Achieve cryopreservation in an automated or manual controlled rate freezing apparatus following standard procedures (approximately 1°C decrease per minute).
9. Transfer frozen cells to liquid nitrogen, (vapor phase) storage at -200°C to -125°C is recommended.

## Recovery









1. Remove cells from cryo-storage and rapidly thaw (<1 minute) frozen vial in a 37°C water bath until only a small amount of ice remains.
2. Transfer cell suspension to a sterile 15-mL conical tube. Add, dropwise, the appropriate pre-warmed complete growth medium to a total volume of 10 mL. Ensure complete mixing with regular gentle swirling.
3. Centrifuge cell suspension at  $100\text{--}200 \times g$  for 5–10 minutes.  
**Note:** Centrifugation speed and duration may vary depending on cell type.
4. Ascertain presence of cell pellet. Aseptically decant supernatant without disturbing the cell pellet.
5. Gently resuspend cell pellet in an appropriate volume (e.g., 5 mL per 25 cm<sup>2</sup> surface area) of pre-warmed complete growth medium.
6. Transfer cell suspension to sterile culture vessel and place into the recommended culture environment.

## Related products

Product	Catalog no.
TrypLE™ Select (1X), no Phenol Red	12563
TrypLE™ Express (1X), Phenol Red	12605
TrypLE™ Express (1X), no Phenol Red	12604
Fetal Bovine Serum, Dialyzed (US)	26400
0.05% Trypsin-EDTA (1x), phenol red	25300
Trypan Blue Solution, 0.4%	15250
Countess® Automated Cell Counter	C10227
MEM Non-Essential Amino Acids (100X), liquid	11140
100 mM Sodium Pyruvate	11360
Advanced DMEM	12491
Advanced MEM	12492
Advanced RPMI 1640	12633
Advanced DMEM/F-12	12634
GlutaMAX™-I, 200 mM (100X), liquid	35050
Synth-a-Freeze®-Defined, Cryopreservation Medium	A12542

## Explanation of symbols and warnings

The symbols present on the product label are explained below:

			
Use By:	Manufacturer	Temperature Limitation	Batch code
			
Catalog number	Consult instructions for use	Caution, consult accompanying documents	Sterilized using aseptic processing techniques

## Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at [www.lifetechnologies.com/termsandconditions](http://www.lifetechnologies.com/termsandconditions). If you have any questions, please contact Life Technologies at [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support).

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For additional technical information such as Safety Data Sheets (SDS), Certificates of Analysis, visit [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support)  
For further assistance, email [techsupport@lifetech.com](mailto:techsupport@lifetech.com)

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