CryoGuard™ Freezing Media

Cat. No. TM078

Store at -20°C for long term storage; stable up to 6 months. Store 4°C for short term storage and use within 7-14 days. Protect from light. To avoid repeated freeze–thaw cycles, store in single-use aliquots (e.g., 10–20 ml/tube).

Product Description

CryoGuard™ Freezing Media is a ready-to-use, serum-free chemically defined solution formulated for the cryopreservation of a wide variety of mammalian cells, including primary cells, established cell lines, and stem cells, without the need for animal serum supplementation. Designed to maintain high cell viability and recovery after thawing, CryoGuard™ **offers a reliable, xeno-free alternative to traditional serum-based freezing methods.**

By eliminating serum and animal-derived components, CryoGuard™ supports regulatory compliance for clinical research, biomanufacturing, and cell therapy applications, while also providing enhanced batch-to-batch consistency for basic and translational research needs.

Cat. No.	Product	Quantity
TM078	CryoGuard™ Freezing Media	50 ml

Key Features:

1. **Ready-to-Use:** No dilution or mixing required
2. **Serum-Free and Xeno-Free:** Eliminates variability associated with animal-derived components
3. **High Post-Thaw Viability:** Optimized formulation supports superior cell survival and function
4. **Stem Cell Compatible:** Preserves the viability, pluripotency, and differentiation potential of stem cells during freezing and thawing
5. **Broad Compatibility:** Suitable for primary cells, immune cells, hybridomas, cancer cell lines, and stem cells
6. **GMP-friendly:** Manufactured under strict quality control, supporting research and preclinical applications

CryoGuard™ empowers researchers with a defined, serum-free cryopreservation solution designed for maximum reliability — whether you're banking primary cells, preserving critical research models, or safeguarding valuable stem cell populations.

Protocol

1. **Cryopreservation.**
   For optimal results, cells should be in mid-log phase of growth with >90% viability at time of freezing. Volumes given below are for a T75 flask; proportionally increase or decrease the volume as required per culture vessel size. Subculture cells once the culture vessel is 80% confluent.
   - Thaw CryoGuard™ and keep at 2°C-8°C before use.
   - Subculture cells,
     Adherent cells:
     - Aspirate the culture media, and add 2-3ml of pre-warmed 0.25% Trypsin-EDTA to the culture vessel.
     - Observe the cells under a microscope to confirm detachment (typically within 2-10 minutes). Cells that are difficult to detach can be put in 37°C, for several minutes to facilitate detachment.
     - Neutralize Trypsin-EDTA by adding an equal volume of the complete growth media into the culture vessel.
     - Transfer the culture suspension into a sterile centrifuge tube, and centrifuge at 125xg for 5 minutes. The actual centrifuge duration and speed may vary depending on the cell type.

     Suspension cells:
     - Transfer the culture suspension into a sterile centrifuge tube, and centrifuge at 125xg for 5 minutes. The actual centrifuge duration and speed may vary depending on the cell type.
   - Aspirate the supernatant, and re-suspend the pellet with CryoGuard™ at recommended viable cell density (e.g., $1x10^6$ cells/ml).
   - Dispense aliquots for cell suspension (mix frequently for homogenous cell suspension) into prepared cryovials.
   - Transfer cryovials to controlled rate freezing apparatus (-1°C/min) such as Mr. Frosty™ Freezing Container or **abm**'s Vial Cell Freezing Container (Cat. No. Q5085 or Q5086).
   - Store frozen cryovials at -130°C or liquid nitrogen vapour phase.

2. **Recovery**
   For optimal results, vials should be stored at -130°C or liquid nitrogen vapour phase. Transfer frozen vial from cryo-storage with dry ice.
   - Thaw cells quickly in a 37°C water bath while agitating gently (maximum 2 minutes). The vial cap should be kept above the water level to minimize the risk of contamination.
   - Decontaminate the vial by spraying and wiping the exterior of the vial with 70% ethanol. From this point onwards, all operations should be strictly carried out inside a biological safety cabinet using aseptic conditions.
   - Transfer the cell suspension into a 15ml sterile conical tube containing 5ml of pre-warmed, complete growth media. Centrifuge cells at 125xg for 5-7 minutes.
   - Aspirate the supernatant without disturbing the cell pellet. Re-suspend the cell pellet in the recommended pre-warmed, complete growth media and dispense into a T25 culture flask.
   - Incubate the cells at the recommended conditions.

Applied Biological Materials Inc. ● 1-866-757-2414 ● info@abmGood.com ● www.abmGood.com