CryoGuard™

Universal Cryopreservation Medium | Cat # TM078 | Research Use Only

abm The Cell Designer

Freeze with Confidence.

A serum-free, xeno-free cryopreservation medium validated across mammalian cell lines delivering excellent post-thaw viability at a fraction of competitor costs.

PRODUCT SNAPSHOT

Product Name	CryoGuard™ Freezing Media
Catalog #	TM078
Volume	50 mL per unit
Regulatory	Research Use Only (RUO)
Formulation	Serum-Free, Xeno-Free, Defined
Sterility	Negative
Compatible Cell Growth	Adherent & Suspension
Cell Lines Validated	50+ mammalian cell lines

KEY ADVANTAGES VS. TRADITIONAL DMSO/FBS MEDIA

Ready-to-Use
No in-house preparation. Simply thaw, apply, and freeze. Reduces contamination risk.

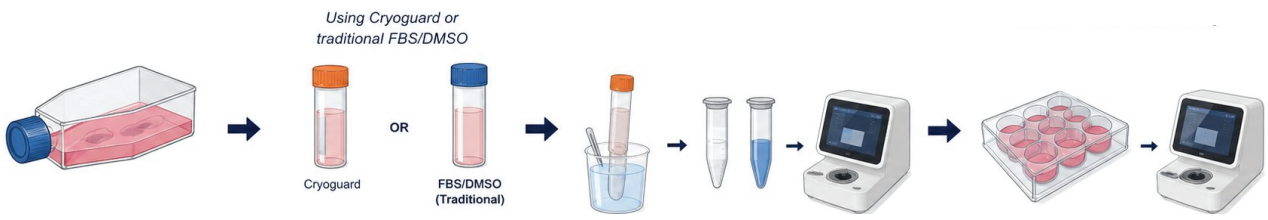
Lot-to-Lot Consistency
Chemically defined chemistry delivers reproducible results across experiments and labs.

Broad Validation
Internally QC-validated across 50+ mammalian cell lines by abm R&D, including challenging cell types.

No Serum Lot Variability
Defined formulation eliminates batch-to-batch FBS variability — critical for reproducible science.

Xeno-Free
No animal-derived components — compatible with stringent ethical and regulatory mandates.

METHODS & EXPERIMENTAL DESIGN



1. Grow/Culture Cells
Culture under standard conditions until ready for freezing.

2. Freeze Down
Resuspend in CryoGuard™ or FBS/DMSO; aliquot into cryovials and freeze.

3. Thaw & Assess Viability
Thaw at 37°C, dilute, and assess by trypan blue and automated counter.

4. Plate & Re-assess (24h)
Plate cells, incubate 24h, then re-assess viability to confirm recovery.

TEST GROUPS

Group	Composition	Formulation Type
CryoGuard™ (TM078)	Serum-free, xeno-free	Defined, RTU
Control Group	70% complete medium + 20% FBS + 10% DMSO	Serum-containing
Commercial ES Reagent†	Commercial Embryonic Stem (ES) Reagent	Serum-free

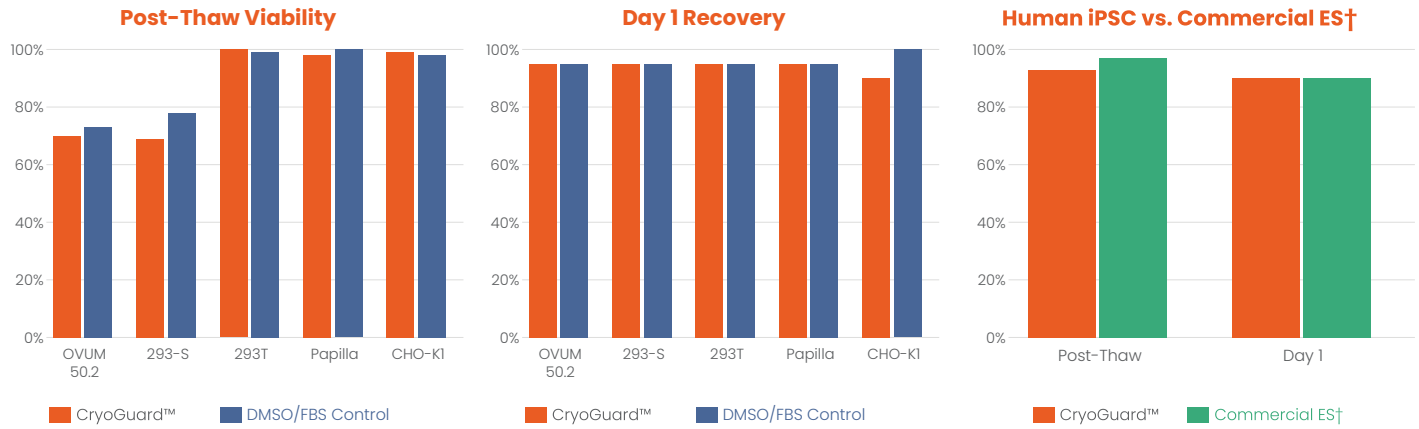
† Commercial ES reagent used for iPSC testing only — reflects serum-free requirements of pluripotent cell culture. See back for data.

Validation Data

Post-thaw viability across adherent and suspension mammalian cells and iPSCs

Head-to-Head Performance

POST-THAW VIABILITY — CRYOGUARD™ VS. DMSO/FBS CONTROL



FULL VALIDATION DATASET — CRYOGUARD™ (TM078)

Cell Line	Cat.No.	Growth	Post-Thaw CryoGuard™	Post-Thaw Control	Day 1 CryoGuard™	Day 1 Control
OVUM 50.2	N/A	Suspension	**70%**	73%	**95%**	95%
293-S	T8030	Suspension	**69%**	78%	**95%**	95%
293T	LV010	Adherent	**100%**	99%	**95%**	95%
Dermal Papilla (O Clone 1)	T0875	Adherent	**98%**	100%	**95%**	95%
CHO-K1	N/A	Adherent	**99%**	98%	**90%**	100%
Human iPSC	N/A	Adherent	**93%**	97%†	**90%**	90%†

SUMMARY STATISTICS

89.4%
Mean Post-Thaw Viability CryoGuard™

89.6%
Mean Post-Thaw Viability Control

93.3%
Day 1 Mean Recovery CryoGuard™

CONCLUSIONS & ADDITIONAL NOTES

Key Conclusions

CryoGuard™ achieved equivalent post-thaw viability compared to traditional DMSO+FBS controls for both adherent and suspension cells.

ORDERING INFORMATION — ASSOCIATED MATERIALS

Product Name	Cat. No.
CryoGuard™ Universal Cryopreservation Medium	TM078
2.0 mL Ext. Thread Cryogenic Vials (25/Bag)	G7595
12-Vial Alcohol-Free Cell Freezing Container	Q5085
30-Vial Alcohol-Free Cell Freezing Container	Q5086