

FrostaLife™ and FrostaLife Xeno-Free Cryopreservation Solutions Specification Sheet



FrostaLife Cryopreservation Solutions

FrostaLife is a solution optimized for the cryopreservation of mammalian cells. Simply count your cells, centrifuge them and resuspend the cell pellet in the desired volume of FrostaLife and dispense into cryopreservation vials.

FrostaLife Cryopreservation Solution Components

FrostaLife is a ready-to-use cryopreservation solution containing DMSO and fetal bovine serum. FrostaLife Xeno-Free[§] is a ready-to-use cryopreservation solution containing DMSO and human serum. Both FrostaLife and FrostaLife Xeno-Free contain no antimicrobials and no phenol red. Lifeline offers antimicrobials and phenol red; however they are not required for eukaryotic cell proliferation.

Features and Benefits:

- **Optimized for cryopreservation of mammalian cells by Lifeline's cell culture experts** – In comparison with other commercially available cryopreservation solutions, FrostaLife shows better post-thaw viability and cell reattachment, and better overall recovery (fewer lysed/destroyed cells).
- **Xeno-Free** – Allows freezing without exposure to non-human components.

Product	Part No.	Volume	Storage
FrostaLife Cryopreservation Solution	LM-0015	100 mL	-20°C Once thawed, store at 2-8°C for up to 2 months*.
FrostaLife Xeno-Free [§] Cryopreservation Solution	LM-0019	100 mL	-20°C Once thawed, store at 2-8°C for up to 2 months*.

Quality Testing for Guaranteed Consistency and Reproducible Results

Lifeline Cell Technology manufactures products using the highest quality raw materials and incorporates ISO style quality assurance in every production run. Exacting standards and production procedures ensure lot-to-lot consistency. FrostaLife solution is extensively tested using melanocytes.

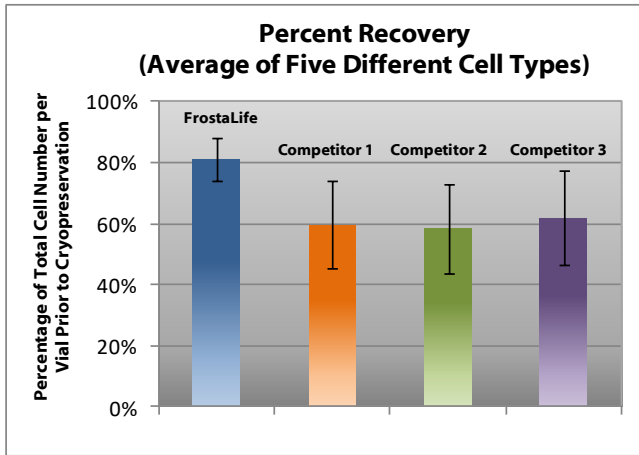
FrostaLife Cryopreservation Solution is Tested For:	
• Sterility	Negative for bacterial and fungal growth
• pH	7.6 ±0.5
• Cell Culture	Cryopreservation and re-plating of human melanocytes
• Serology Testing	Human serum used in FrostaLife Xeno-Free has tested negative for HIV-1, HIV-2, HCV, and HBV

*If less than 20 mL are used, aliquoting is recommended to minimize freeze/thaw cycles.

[§]Lifeline documents that all materials used in the manufacture of products which are labeled 'Xeno-Free' have never come into contact with material of animal (non-human) origin and are not of animal (non-human) origin. FrostaLife Xeno-Free Cryopreservation Solution contains human serum.

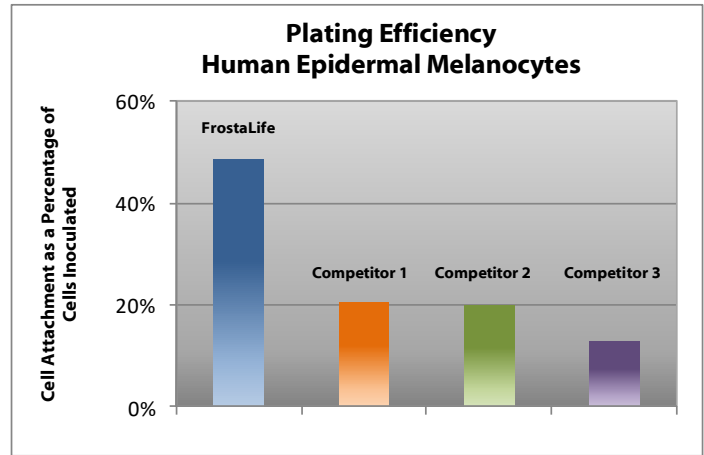
To place an order, please visit lifelinecelltech.com or call technical and customer service at 877.845.7787.

In comparisons with other commercially available cryopreservation solutions, FrostaLife™ shows better post-thaw viability and cell reattachment, and better overall recovery (fewer lysed or destroyed cells).



Average recovery of cells after cryopreservation:

Human Epidermal Keratinocytes, Human Dermal Microvascular Endothelial Cells, Human Mesenchymal Stem Cells, Human Epidermal Melanocytes, and Human Umbilical Vein Endothelial Cells were cultured and cryopreserved in various cryopreservation solutions. After thawing the vials, cells were counted and the total number of cells (viable and non-viable) was compared to the total number of viable cells that were dispensed prior to cryopreservation.



Post-thaw plating efficiency:

Human Epidermal Melanocytes, were cultured in DermaLife M Medium and cryopreserved in various cryopreservation solutions. After thawing the vials, cells were counted and inoculated into flasks. The following day, the cells that had attached were removed from the flask and counted. This value was compared to the total number of viable cells inoculated.

The Lifeline® Guarantee

Lifeline’s rigorous quality control ensures sterility and performance to standardized testing criteria. Upon request, Lifeline will provide lot-specific QC test results, material safety data sheets and certificates of analysis. See complete guarantee/warranty statement at lifelinecelltech.com or contact your Lifeline representative for more information.

Safety Statement

This product is for Research Use Only. This product is not approved for human or veterinary use, or for use in *in vitro* diagnostics or clinical procedures.

FrostaLife Xeno-Free contains human serum and should be handled as potentially infectious material. While the human serum used in this product has been tested, no known test method can guarantee the absence of Hepatitis B virus, Hepatitis C virus, HIV-1, HIV-2 or other infectious agents. All products which contain or have contacted human blood based products should be handled as Biosafety Level 2 (CDC.gov) and according to the Bloodborne Pathogen Standard 29 CFR 1910.1030.

Call Lifeline Technical Service and Sales at 877.845.7787
or visit lifelinecelltech.com for more information

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