

## iPS Validated Fibroblast Cell Culture Systems

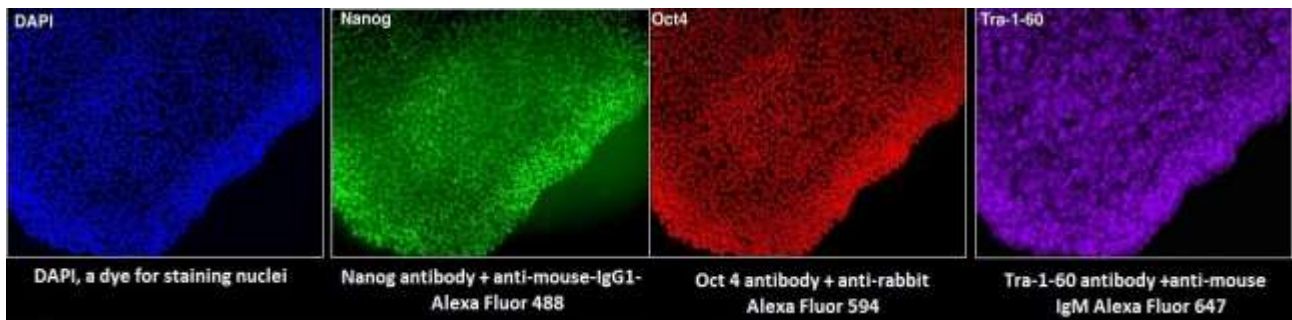
**Normal Human Dermal Fibroblast, Neonatal  
FibroLife® Serum Free Medium  
TrypKit™ Subculturing Reagent Kit  
FrostaLife™ Cryopreservation Solution**

Lifeline’s Normal Human Dermal Fibroblasts have been validated for their ability to become Induced Pluripotent Stem Cells (iPS). Neonatal Fibroblast Cells, LOT # 00866, can be transduced with lentiviral vectors with very high efficiencies.

Lifeline’s Normal Human Dermal Fibroblasts derived from neonatal skin are cryopreserved as primary cells to ensure the highest purity, viability, and plating efficiency. These Fibroblasts are quality tested in FibroLife Serum-Free Medium and demonstrate optimal growth at rates equal to or greater than classical serum-supplemented media.

Lifeline’s Xeno-Free Normal Human Dermal Fibroblasts are quality tested in Lifeline’s FibroLife Xeno-Free Medium which supports fibroblast growth, without the use of animal-derived components, at rates equal to or greater than media supplemented with 2-10% fetal bovine serum.

Transduction of Normal Human Dermal Fibroblast LOT # 00866 with lentiviral vectors and subsequent fluorescent labeling with antibodies to Nanog, Oct 4, and Tra-1-60 demonstrates very high levels of expression for these biomarkers of Pluripotency and iPS Cells.



*Photo courtesy of Dr. Rick Cohen of Rutgers University*

### NORMAL HUMAN FIBROBLASTS ARE TESTED FOR:

• Cell Count	500,000 cryopreserved cells per vial
• Proliferation and Morphology	Normal cell appearance for 15 population doublings
• Cell Viability	≥ 70% viability when thawed from cryopreservation
• Sterility Testing	Negative for mycoplasma Negative for bacterial and fungal growth
• Virus Testing	Negative for HIV-1, HIV-2, HBV, and HCV by PCR

*To place an order, please visit [lifelinecelltech.com](http://lifelinecelltech.com) or call technical and customer service at 877.845.7787.*

## Quality Testing for Guaranteed Consistency and Reproducible Results

Lifeline Cell Technology manufactures products using the highest quality raw materials and incorporates extensive quality assurance in every production run. Exacting standards and production procedures ensure consistent performance.

### The Lifeline® Guarantee

Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. All donated tissues have been obtained under proper informed consent and adheres to the Declaration of Helsinki, The Human Tissue Act (UK), CFR Title 21, and HIPAA Regulations relative to obtaining and handling human tissue for Research Use. 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](http://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* diagnostic or clinical procedures.

Lifeline recommends storing cryopreserved vials in liquid nitrogen vapor phase. Handle cryopreserved vials with caution. Always wear eye protection and gloves when working with cell cultures. Aseptically vent any nitrogen from cryopreserved vials in a biosafety cabinet prior to thawing the vials in a water bath. If vials must be stored in liquid phase, the vials should be transferred to vapor phase storage or -80°C for up to 24 hours prior to being thawed.

The Xeno-Free products contain 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](http://cdc.gov)) and according to the Bloodborne Pathogen Standard 29 CFR 1910.1030 and should not be recycled.

PRODUCT INFORMATION:	
Part #	Description
FC-0001	Normal Human Dermal Fibroblasts, Neonatal, Primary – 500,000 cells per vial ( <i>LOT # 00866 for iPS Validated Product</i> )
LL-0001	FibroLife® Serum-Free Medium Complete Kit - <i>For the culturing of Human Fibroblast Cells</i>
LL-0013	TrypKit™ Subculturing Reagents Kit
LM-0015	FrostaLife™ Cryopreservation Solution
FC-0037	Normal Human Dermal Fibroblasts-Neonatal, Xeno-Free, Primary – 500,000 cells per vial ( <i>Isolated and cryopreserved with animal-derived component free reagents and media.</i> )
LM-0013	FibroLife Xeno-Free Complete Medium ( <i>Animal-derived components free reagents</i> )
LL-0043	TrypKit Xeno-Free Subculturing Reagents Kit ( <i>Animal-derived components free reagents</i> )
LM-0019	FrostaLife Xeno-Free Cryopreservation Solution ( <i>Animal-derived components free solution</i> )

**Call Lifeline Technical Service and Sales at 877.845.7787**  
or visit [lifelinecelltech.com](http://lifelinecelltech.com) for more information

**Lifeline Cell Technology – 8415 Progress Drive, Suite T – Frederick, MD 21701**

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