

## AdipoLife™ DfKt™-1 Adipogenesis Medium Specification Sheet



### AdipoLife DfKt-1 Adipogenesis Medium

AdipoLife is a new medium optimized for the differentiation of Human Adipose-derived Mesenchymal Stem Cells (HMSC-Ad) and Pre-Adipocytes (HMSC- Pre-Adipocytes) into adipocytes.

AdipoLife Basal Medium contains no antimicrobials and no phenol red. Antimicrobials are not required, but are recommended during differentiation due to the duration of culture and the frequency of handling of the cultures. Antimicrobials and phenol red may be purchased separately from Lifeline.

### AdipoLife Medium Components

AdipoLife is offered in a kit format composed of basal medium and associated supplements and differentiation factors called "DiffFactors." This kit allows you to prepare fresh medium in your laboratory, extending shelf life and enhancing performance. AdipoLife Basal Medium is provided in a 100 mL bottle. The remaining DiffFactors (growth factors and supplements) are packaged in a convenient gas-impermeable pouch for easy storage.

Product	Part No.	Volume	Final Concentration in Supplemented Medium	Storage
<b>AdipoLife DfKt-1 Adipogenesis Medium Complete Kit, (AdipoLife Basal Medium, AdipoLife DiffFactor™ 1 and DiffFactor 2)</b>	<a href="#">LL-0050</a>			2-8°C when prepared
AdipoLife Basal Medium	<a href="#">LM-0021</a>	100 mL		-20°C
DiffFactor 1	<a href="#">LS-1074</a>	1 mL	Proprietary	-20°C
DiffFactor 2	<a href="#">LS-1075</a>	5 mL	Proprietary	-20°C

Other Recommended Products	Part No.	Unit	Components	Storage
Human Mesenchymal Stem Cells-Adipose (HMSC-Ad)	<a href="#">FC-0034</a>	10 <sup>6</sup> Cells		-150°C
StemLife™ MSC Medium Complete Kit	<a href="#">LL-0034</a>	Kit	StemLife Basal Medium StemLife MSC LifeFactors® Kit	2-8°C when prepared
Human Pre-Adipocytes, Adult (HMSC-Pre-Adipocyte)	<a href="#">FC-0062</a>	10 <sup>6</sup> Cells		-150°C
FibroLife® S2 Medium Complete Kit	<a href="#">LL-0011</a>	Kit	FibroLife Basal Medium FibroLife S2 LifeFactors Kit	2-8°C when prepared
Oil Red O Staining Kit	<a href="#">LL-0052</a>	Kit	Fixative Dehydration Solution Oil Red O Stain Stain Differential Solution	-20°C RT RT RT
TrypKit™	<a href="#">LL-0013</a>	Kit	PBS 0.05% Trypsin/0.02% EDTA Trypsin Neutralizing Solution	RT -20°C -20°C
Optional Supplements	Part No.	Volume	Concentrations of Supplement	Storage
Phenol Red Supplement	<a href="#">LS-1009</a>	1 mL	33 mM	RT
Antimicrobial Supplement: Gentamicin and Amphotericin B (Provided with purchase of <i>LL-0011, LL-0034, or LL-0058</i> )	<a href="#">LS-1104</a>	0.5 mL	Gentamicin 30 mg/mL Amphotericin B 15 µg/mL	-20°C

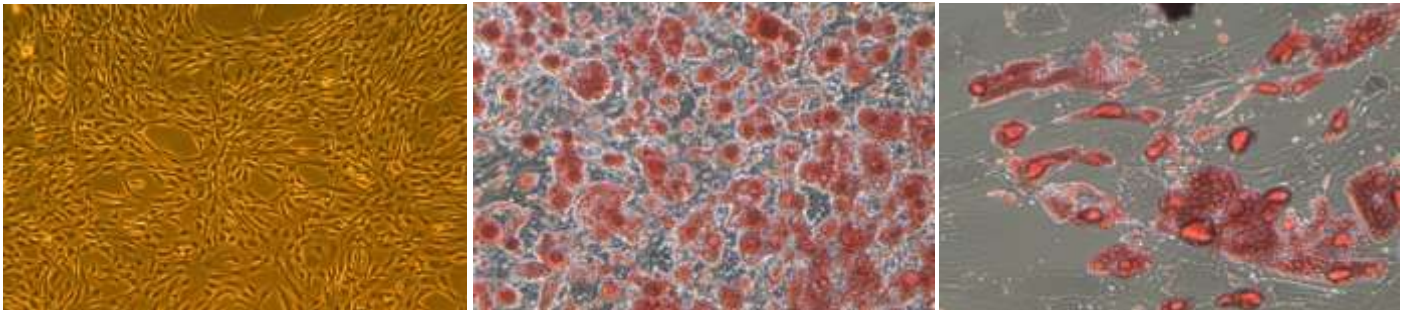
To place an order, please visit [lifelinecelltech.com](http://lifelinecelltech.com) or call customer service at 877.845.7787.

## Quality Testing for Guaranteed Consistency and Reproducible Results

Lifeline Cell Technology manufactures products using the highest quality raw materials and incorporates ISO style quality assurance in every production run. Exacting standards and production procedures ensure lot-to-lot consistency. Every production lot of AdipoLife™ DfKt™-1 Adipogenesis Medium is extensively tested using Human Mesenchymal Stem Cells-Adipose.

- Sterility Testing      Negative for bacteria and fungal growth
- pH                      7.6 +/- 0.3
- Cell Testing            Rate of proliferation and morphology
- Osmolality            255 +/- 15 mOsm
- Endotoxin            < 0.5 EU/mL

AdipoLife DfKt-1 Adipogenesis Medium differentiates HMSC-Ad, and HMSC-Pre-Adipocytes into adipocytes. In comparisons with commercially available medium, AdipoLife DfKt-1 shows superior efficiency of differentiation as is demonstrated by the greater accumulation of lipid vesicles.



HMSC-Ad

AdipoLife DfKt-1

Competitor adipogenesis kit

*Shown above, left:* HMSC-Ad, passage 4, 4 days after inoculation with approximately 4,500 cells/cm<sup>2</sup> (100X).

*Shown above, middle:* HMSC-Ad differentiated into Adipocytes using AdipoLife DfKt-1 and stained with Lifeline's Oil Red O Lipid Staining Kit, post 3 weeks differentiation, (200X).

*Shown above, right:* HMSC-Ad differentiated into Adipocytes using a competitor adipogenesis differentiation kit and stained with Lifeline's Oil Red O Lipid Staining Kit, post 3 weeks differentiation, (200X).

## 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](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, for use in *in vitro* diagnostics, or clinical procedures.

**Call Lifeline Technical Service and Sales at 877.845.7787**  
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