

## OsteoLife™ Complete Osteogenesis Medium Specification Sheet



### OsteoLife Complete Osteogenesis Medium

OsteoLife is a new medium optimized for the differentiation of Human Mesenchymal Stem Cells (HMSC) into osteocytes.

OsteoLife Complete Osteogenesis 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.

### OsteoLife Medium Components

OsteoLife is offered as a convenient and easy to use, fully-supplemented complete medium, stored frozen to extend shelf life.

Product	Part No.	Volume	Final Concentration in Supplemented Medium	Storage
<b>OsteoLife Complete Osteogenesis Medium</b>	<a href="#">LM-0023</a>	100 mL	Proprietary	-20°C or 2-8°C once thawed

Other Recommended Products	Part No.	Unit	Components	Storage
Human Mesenchymal Stem Cells-Wharton's Jelly	<a href="#">FC-0020</a>	0.5 x 10 <sup>6</sup> Cells		-150°C
Human Mesenchymal Stem Cells-Adipose	<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 Mesenchymal Stem Cells-Bone Marrow	<a href="#">FC-0057</a>	10 <sup>6</sup> Cells		-150°C
StemLife MSC-BM Medium Complete Kit	<a href="#">LL-0062</a>	Kit	StemLife Basal Medium StemLife MSC-BM LifeFactors Kit	2-8°C when prepared
Human Pre-Adipocytes, Adult	<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
2% Alizarin Red Stain	<a href="#">CM-0058</a>	100 mL		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 LL-0011, LL-0034, or LL-0062)	<a href="#">LS-1104</a>	0.5 mL	Gentamicin 30 mg/mL Amphotericin B 15 µg/mL	-20°C

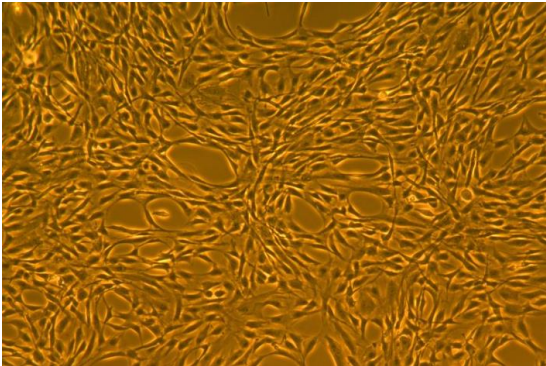
To place an order, please visit [lifelinecelltech.com](http://lifelinecelltech.com) or call technical and customer service at 877.845.7787.

## Quality Testing for Guaranteed Consistency and Reproducible Results

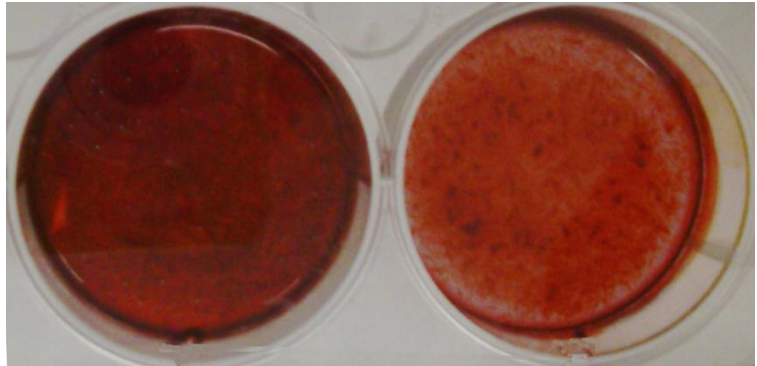
Lifeline Cell Technology manufactures products using the highest quality raw materials and incorporates ISO style quality assurance in every production run. Exacting standards and production procedures ensure lot-to-lot consistency. Every production lot of OsteoLife™ Complete Osteogenesis Medium is extensively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

- Sterility Testing      Negative for bacteria and fungal growth
- pH                      7.4 +/- 0.3
- Cell Testing            Rate of proliferation and morphology
- Osmolality            330 +/- 15 mOsm
- Endotoxin            < 0.5 EU/mL

OsteoLife Complete Osteogenesis Medium differentiates HMSC-Ad, HMSC-BM, HMSC-Pre-Adipocytes, and HMSC-WJ into osteocytes. In comparisons with commercially available media, OsteoLife shows superior efficiency of differentiation as is demonstrated by the greater deposit of calcium.



HMSC-Ad



OsteoLife

Competitor osteogenesis 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 Osteocytes using OsteoLife and stained with Lifeline's Alizarin Red Stain to visualize the calcium deposition, post 3 weeks differentiation, (1X).

*Shown above, right:* HMSC-Ad differentiated into Osteocytes using a competitor osteogenesis differentiation kit and stained with Lifeline's Alizarin Red Stain to visualize the calcium deposition, post 3 weeks differentiation, (1X).

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

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

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