

## OsteoLife™ Complete Osteogenesis Medium Specification Sheet



### OsteoLife Complete Osteogenesis Medium

OsteoLife is a new medium optimized for the differentiation of adult human mesenchymal stem cells into osteocytes. OsteoLife contains no antimicrobials and no phenol red; components that can cause cell stress and “masking effects” that may influence experimental results (Lifeline® offers these traditional supplements; however they are not needed, or recommended, to achieve optimal cell performance).

### OsteoLife Medium Components

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

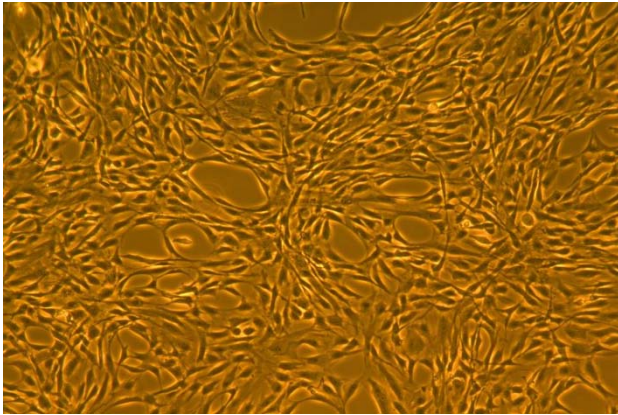
Product	Part No.	Volume	Final Concentration in Supplemented Medium	Storage
<b>OsteoLife Complete Osteogenesis Medium</b>	LM-0023	100 mL	Proprietary	-20°C or 2-8°C once thawed
<b>Other Recommended Products</b>	<b>Part No.</b>	<b>Unit</b>		<b>Storage</b>
<b>Human Mesenchymal Stem Cells-Adult (HMSC-Ad)</b>	FC-0034	10 <sup>6</sup> Cells		-150°C
<b>StemLife™ MSC Medium Complete Kit</b>	LL-0034	Kit	StemLife MSC Basal Medium StemLife MSC LifeFactors® Kit	2-8°C when prepared
<b>2% Alizarin Red Stain</b>	CM-0058	100 mL		RT
<b>TrypKit™</b>	LL-0013	Kit	PBS 0.05% Trypsin/0.02% EDTA Trypsin Neutralizing Solution	RT -20°C -20°C
<b>Optional Supplements</b>	<b>Part No.</b>	<b>Volume</b>	<b>Concentrations of Supplement</b>	<b>Storage</b>
Phenol Red Supplement	LS-1009	1.0 mL	33 mM	RT
Antimicrobial Supplement: Penicillin, Streptomycin and Amphotericin B	LS-1011	1.0 mL	Penicillin 10,000 Units/mL Streptomycin 10,000 µg/mL Amphotericin B 25 µg/mL	-20°C

### 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-Adult.

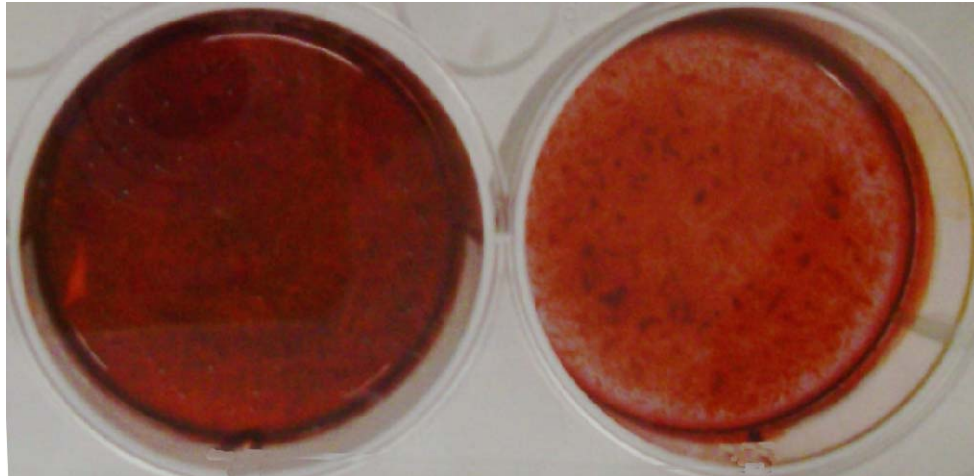
- Sterility Testing      Negative for bacteria and fungal growth
- pH                        7.4 +/- 0.3
- Cell Testing            Rate of proliferation and morphology
- Osmolality            330 +/- 15 mOsm
- Endotoxin            < 0.5 EU/mL

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



OsteoLife™ Complete Osteogenesis Medium differentiates adult mesenchymal stem cells (left) into osteocytes. In comparisons with commercially available media, OsteoLife shows superior efficiency of differentiation.

*Shown below:* Human Mesenchymal Stem Cells – Adult; differentiated with OsteoLife (left) or a competitor (right). Cells differentiated into osteocytes using OsteoLife show greater calcium deposition than cells differentiated using the leading competitor. Cells were fixed and stained with Alizarin Red to visualize the calcium deposition.



OsteoLife – 3 weeks, 1x

Competitor Kit – 3 weeks, 1x

### **The Lifeline® Guarantee**

Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. If Lifeline's products do not meet our posted performance and quality standards, we will replace them at no charge or provide a full refund. 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***

**Lifeline Cell Technology – 10 East Frederick Street – Walkersville, MD 21793**

©2010 Lifeline Cell Technology. All Rights Reserved