

## ChondroLife™ Complete Chondrogenesis Medium Specification Sheet



### ChondroLife Complete Chondrogenesis Medium

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

ChondroLife Complete Chondrogenesis 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.

### ChondroLife Complete Medium Components

ChondroLife 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>ChondroLife Complete Chondrogenesis Medium</b>	<a href="#">LM-0022</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 (HMSC-WJ)	<a href="#">FC-0020</a>	0.5 x 10 <sup>6</sup> Cells		-150°C
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 Mesenchymal Stem Cells-Bone Marrow (HMSC-BM)	<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 (HMSC-Pre-Adipocyte)	<a href="#">FC-0062</a>	10 <sup>6</sup> Cells		-150°C
StemLife PA Medium Complete Kit	<a href="#">LL-0058</a>	Kit	StemLife PA Basal Medium StemLife PA LifeFactors Kit	2-8°C when prepared
Alcian Blue Staining Kit	<a href="#">LL-0051</a>	Kit	Fixative Stabilizer Solution Alcian Blue Stain Wash 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 <a href="#">LL-0034</a> , <a href="#">LL-0058</a> , or <a href="#">LL-0062</a> )	<a href="#">LS-1104</a>	0.5 mL	Gentamicin 30 mg/mL Amphotericin B 15 µg/mL	-20°C

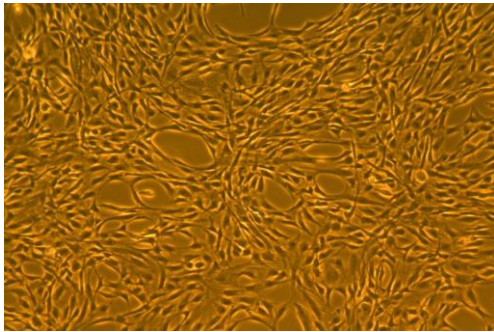
To place an order, please visit [lifelinecelltech.com](http://lifelinecelltech.com) or call technical and customer service at 877.845.7787.

## Quality Testing for Guaranteed Consistency and Reproducible Results

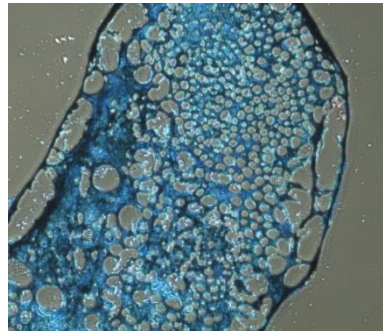
Lifeline Cell Technology manufactures products using the highest quality raw materials and incorporates ISO style quality assurance in every production run. Exacting standards and production procedures ensure lot-to-lot consistency. Every production lot of ChondroLife™ Complete Chondrogenesis Medium 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            285 +/- 15 mOsm
- Endotoxin            < 0.5 EU/mL

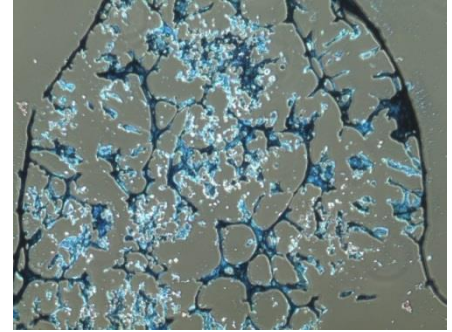
ChondroLife Complete Chondrogenesis Medium differentiates HMSC-Ad, HMSC-BM, HMSC-Pre-Adipocytes, and HMSC-WJ into chondrocytes. In comparisons with commercially available medium, ChondroLife shows superior efficiency of differentiation as is demonstrated by the greater deposit of sulfated proteoglycans.



HMSC-Ad



ChondroLife



Competitor chondrogenesis 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 Chondrocytes using ChondroLife and stained with Lifeline's Alcian Blue Staining Kit to visualize the proteoglycan deposition, post 3 weeks differentiation, (100X).

*Shown above, right:* HMSC-Ad differentiated into Chondrocytes using a competitor chondrogenesis differentiation kit and stained with Lifeline's Alcian Blue Staining Kit to visualize the proteoglycan deposition, post 3 weeks differentiation, (100X).

## 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

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

©2017 Lifeline Cell Technology. All Rights Reserved