

# StemLife™ MSC-BM Cell Culture Medium Specification Sheet



#### StemLife MSC-BM Cell Culture Medium

StemLife MSC-BM Medium is a new medium optimized for the culture of Human Bone Marrow Mesenchymal Stem Cells (HMSC-BM). StemLife MSC-BM supports the undifferentiated expansion of HMSC-BM.

StemLife Basal Medium contains no antimicrobials and no phenol red. Lifeline offers antimicrobials and phenol red; however, they are not required for eukaryotic cell proliferation.

#### **StemLife MSC-BM Features and Benefits**

StemLife MSC-BM is offered in a kit format composed of basal medium and associated supplements and growth factors called "LifeFactors®." This kit allows you to prepare fresh medium in your laboratory, extending shelf life and enhancing performance. StemLife Basal Medium is provided in a light-protected

500 mL bottle. The remaining LifeFactors (growth factors and supplements) are packaged in a convenient gasimpermeable pouch for easy storage.

Product	Part No.	Volume	Final Concentrations in Supplemented Medium	Storage
StemLife MSC Medium Complete Kit, (StemLife Basal Medium, StemLife MSC-BM LifeFactors Kit)	<u>LL-0062</u>			2-8°C when prepared
StemLife Basal Medium	LM-0011	485 mL		2-8°C
StemLife MSC-BM LifeFactors Kit	<u>LS-1090</u>			-20°C
rh IGF-1 LifeFactor	LS-1014	0.5 mL	15 ng/mL	-20°C
FBS LifeFactor	LS-1051	35 mL	7%	-20°C
L-Alanyl-L-Glutamine LifeFactor	LS-1053	6 mL	2.4 mM	-20°C
rh FGF-b LifeFactor	LS-1089	0.5 mL	125 pg/mL	-20°C
Antimicrobial Supplement: Gentamicin and Amphotericin B (Provided with purchase of LL-0062)	<u>LS-1104</u>	0.5 mL	Gentamicin 30 µg/mL Amphotericin B 15 ng/mL	-20°C
Optional Supplements	Part No.	Volume	<b>Concentrations of Supplement</b>	Storage
Phenol Red Supplement	<u>LS-1009</u>	1 mL	33 mM	RT
Other Recommended Products		Part No.	Unit	Storage
Human Mesenchymal Stem Cells-Bone Marrow (HMSC-BM)		FC-0057	1,000,000 cells/mL	-150°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 StemLife MSC-BM Medium is extensively tested using bone marrow mesenchymal stem cells. StemLife MSC-BM Medium and Gentamicin-Amphotericin B (LS-1104) are cell culture tested separately.

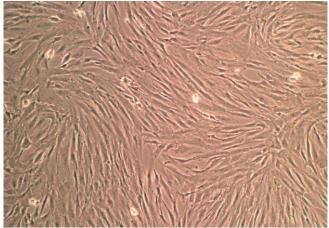
• Sterility Testing Negative for bacterial and fungal growth

• pH 7.8 +/- 0.3

Cell Testing
 Rate of proliferation and morphology

Osmolality 270 +/- 10 mOsmEndotoxin < 0.5 EU/mL</li>

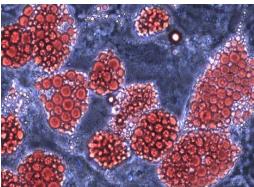
To place an order, please visit lifelinecelltech.com or call technical and customer service at 877.845.7787.

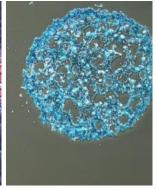


StemLife™ MSC-BM Medium grows Human Bone Marrow Mesenchymal Stem Cells (HMSC-BM) maintaining an undifferentiated state. Mesenchymal stem cells can then be differentiated as seen below.

Shown left: HMSC-BM, passage 3, 5 days after inoculation with 5,000 cells/cm<sup>2</sup> (100X).

Shown below (from left to right): Lifeline's HMSC-BM differentiated to adipocytes (stained with Oil Red O, 400X); chondrocytes (sliced and stained with Alcian blue, 100X); and osteoblasts (stained with Alizarin Red S,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 or contact your Lifeline representative for more information.

## **Innovative Packaging Features**

Lifeline has made significant improvements to traditional medium packaging.

- The specially designed shrink label works as a light barrier to help protect medium from light damage.
- A barrier sleeve helps protect the medium from contaminants found in the water bath.
- Lifeline is an environmentally friendly company. Our cell culture media bottles are recyclable and we ship all products with biodegradable packing material.

## **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 for more information

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