

Lifeline Cell Technology Certificate of Analysis

Product Name: Bone Marrow Derived Mesenchymal Stem Cells
Catalog Number: FC-0057
Product Description: Cryopreserved human bone marrow derived mesenchymal stem cells (BM MSC). Bone marrow derived mesenchymal stem cells are cryopreserved in P2, after isolation from tissue cells are cultured for two passages and then cryopreserved. Vials contain 1,000,000 cells in one ml cryopreservation solution.
Product Lot Number: 03016
Manufacture Date: JAN2013
Expiration Date: Not applicable when stored at or below -150° C

Product Information

Donor Demographics:Sex: Female Tissue Source: Bone Marrow Aspirate
 Age: 31 years Race: Caucasian
 Recommended Culture Medium:.....StemLife MSC Basal Medium, LM-0011, supplemented with
 StemLife MSC-BM LifeFactors Kit, LS-1090

Test	Specifications	Results
Sterility Test, bacteria and yeast	negative	negative
Sterility Test, mycoplasma	negative	negative
PCR virus testing:		
Hepatitis B	negative	negative
Hepatitis C	negative	negative
HIV-1 & HIV-2	negative	negative
Viable Cell Count:	≥1,000,000 cells/ml	1,160,000 cells/ml
Viability (by Trypan Blue Exclusion):	>70% viable	92% viable
Immunophenotype Analysis by Flow Cytometry		
CD29, CD44, CD90, CD105, CD166, CD73	>95% positive	>95% positive
CD14, CD31, CD34, CD45	<2% positive	<2% positive
Undifferentiated Cell Growth in StemLife MSC-BM Complete Medium:		
3 passages growth from cryopreservation	pass test	pass
Cell morphology	normal	normal

Picture of undifferentiated P₄ Bone Marrow Derived Mesenchymal Stem Cells lot 03016, pictured on day 6.



Quality Control: Jeremy Hammond February 18, 2016

Jeremy Hammond, QC Director Lifeline Cell Technology

To place an order call Lifeline technical and customer service at (877) 845-7787 or you may submit an order form by fax to (443) 393-0393. Order form available on line at www.lifelinecelltech.com/order.