

Certificate of Analysis

Human Adult Bone Marrow Mesenchymal Stromal Cells - Cryopreserved Vial

Catalog number: BM012C- 1 (1 x 10⁶ cells/vial)

Lot Number: 13701858

Source ID: Pending

Description: Mesenchymal Stromal cells (MSC) were derived and cultured from freshly collected adult human bone marrow. MSCs were isolated by adherence from bone marrow mononuclear cells isolated using a density gradient. Adherent cells were cultured in MEM-Alpha, supplemented with L-Glutamine and Human Platelet Lysate (Cat#: PB002L). Following passaging, cells were evaluated for purity and viability by flow cytometry. The cells were then cryopreserved in Cryostor CS10 (BioLife Solution, Seattle, WA) using CoolCell (BioCision, San Diego, CA) freezing at -1°C/min. These cells are also available in a fresh, non-frozen format.

Source: Freshly collected adult human bone marrow (Cat#: BM008F-4)

Storage Conditions: Prepare cells for long term frozen storage in Liquid Nitrogen vapor phase or thaw for further experiments.

Principle Markers: CD73⁺, CD90⁺, CD105⁺, CD14⁻, CD19⁻, CD34⁻, CD45⁻, HLA-DR⁻

Biosafety: Cells should be handled following biosafety level 2 procedures. Universal precautions should be utilized when working with these cells. Use aseptic techniques when thawing or handling the cells.

The following donor screening tests have been performed:

CMV testing upon request

Serological Testing:

- Syphilis
- Antibody Screen

Infectious Disease Panel:

- Hepatitis B Core Antibody (Anti-HBc EIA)
- Hepatitis B Surface Antigen (HBsAg EIA)
- Hepatitis C Virus Antibody (Anti-HCV EIA)
- Human Immunodeficiency Virus Antibody (HIV 1/2 plus O)
- Human T-Lymphotropic Virus Antibody (HTLV-I/II)
- HIV-1/HCV/HBV Nucleic Acid Testing
- WNV Nucleic Acid Testing
- Trypanasoma cruzi Antibody

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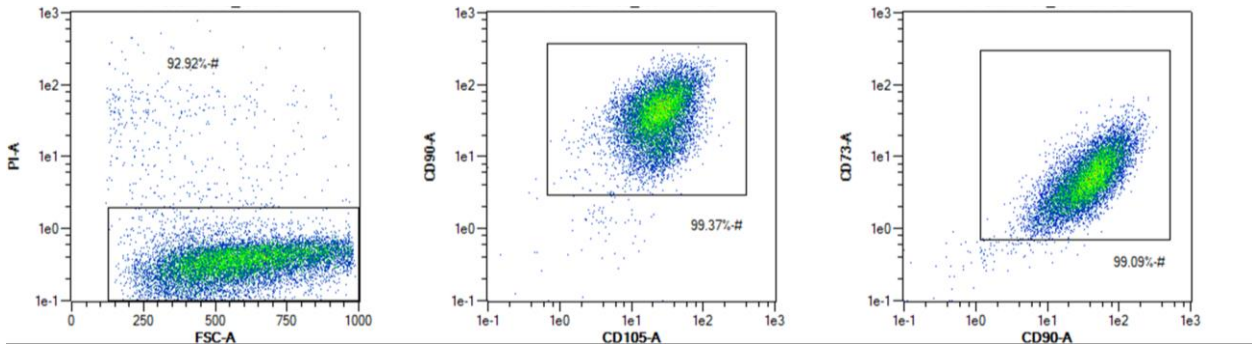
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Passage: 1

Flow Cytometry Analysis



Viability is 92.92% based on FSC/PI staining pre-cryopreservation (not shown).

Surface Marker Summary

CD73 ⁺ Cells	CD90 ⁺ Cells	CD105 ⁺ Cells
>99.09 %	>99.09 %	>99.09%

This lot of MSCs was ≤ 2% of negative markers CD14⁺, CD19⁺, CD34⁺, CD45⁺, HLA-DR

Donor Demographics and Lot Specific Information

Source ID	Age	Gender	Ethnicity	Blood Type	Cryopreservation Date
Pending	43	Female	Caucasian	Pending	April 19, 2016

Donor Testing Panel Results: Negative for all donor screening tests performed

Released by:

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