

## 14-3008: Human Bone Marrow Mesenchymal Stem Cells(Discontinued)

**Reactivity :** Human

### Description

**Cell Source:** Bone Marrow

**Cell Type:** Mesenchymal Stem Cells

**Donor Attributes:** HIV-, HepB-, HepC-

Mesenchymal stem cells (MSCs) are believed to reside in bone marrow perivascular niches where they create and function as a stromal network, supporting other cell types and contributing to the creation and maintenance of connective tissues. These cells have long been believed to be multipotent stromal cells that can differentiate into the cells of the connective tissue in vitro, such as chondrocytes (cartilage), osteoblasts (bone), and adipocytes (fat). Although little is known of the phenotypic characteristics of MSCs in vivo, MSCs in culture are defined by the expression of CD73, CD90, and CD105 and the lack of CD11b, CD19, CD34, CD45, and HLA-DR. Cultured MSCs have shown promising applications in cell-based therapeutic strategies for specific tissues.

Bone marrow mononuclear cells are cultured for 9-14 days using the ACF Culture Kit. After culture adherent cells are checked for the expression of CD73, CD90, and CD105 and the lack of CD14, CD34, and CD45 expression by flow cytometry.

Cells were obtained using Institutional Review Board (IRB) approved consent forms and protocols.

### Product Info

<b>Amount :</b>	1 Vial
<b>Purification :</b>	≥90% CD73, CD90, and CD105 by Flow Cytometry. <5% CD14, CD34, and CD45 by Flow Cytometry
<b>Content :</b>	Each cryopreserved vial contains 1 million cells. Preserved in CryoStor <sup>®</sup> , 10% DMSO
<b>Storage condition :</b>	Immediately upon receipt, store in liquid nitrogen.

### Application Note

For cryopreserved samples, the freeze-thaw cycle may decrease cell viability by 10-15% post-thaw.

#### LIMITED USE RESTRICTIONS:

**THIS PRODUCT IS SOLELY FOR IN VITRO RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

**By use of this product, user agrees to be bound by the terms of this limited use statement.**

**This product is solely for Internal Research Purposes and not for Commercial Purposes. Commercial Purposes include, but are not limited to (1) use of the cell line in manufacturing; (2) use of the cell line to provide a service, information or data; (3) use of the cell line for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the cell line whether or not such cell lines are resold for use in research.**

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