

## 14-1017: Human Peripheral Blood Monocyte-Derived Immature Dendritic Cells(Discontinued)

### Description

Dendritic cells (DCs) form a critical interface between innate and adaptive immunity. DCs continuously sample their environment for antigens by means of endocytosis. Referred to as an antigen-presenting cell (APC), DCs capture, process and present these antigens to naïve T-helper cells to initiate an immune response. There is great heterogeneity in DC phenotypes due to their stage of differentiation or according to their response and interaction with cytokines and/or growth factors in their microenvironment. This can make isolating a specific subset of DCs challenging. Additionally, each subset is rare in number, compounding the difficulty in isolating these cells. Culturing of CD14<sup>+</sup> monocytes in the presence of specific growth factors and cytokines can induce differentiation into immature DCs (iDC), known as monocyte-derived immature dendritic cells (MoDCs). Cultured immature dendritic cells remove the phenotype heterogeneity issue as well as the rarity of these cells.

Human peripheral blood monocyte-derived immature dendritic cells are derived from negatively selected monocytes. Non-monocytes are labeled and depleted from the peripheral blood mononuclear cell population using immunomagnetic particles leaving purified, untouched monocytes. Untouched monocytes are cultured for 4-5 days with 10% FBS in the presence of GM-CSF and IL-4. After culture, cells are checked for the expression of CD11c, HLA-DR, and CD83 and the lack of CD14 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>Content :</b>	Each cryopreserved vial contains 1.5 million cells. Preserved in CryoStor <sup>®</sup> , <sup>†</sup> CS10 (10% DMSO)
<b>Storage condition :</b>	Immediately upon receipt, store in liquid nitrogen.

### Application Note

#### 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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