Product Description

Human Peripheral Blood Monocyte-Derived Immature Dendritic Cells are derived from negatively selected monocytes.

Peripheral blood mononuclear cells are collected using the Spectra Optia® Apheresis System. Non-monocytes are labeled and depleted from the mononuclear cell population using immunomagnetic particles leaving purified, untouched monocytes. The 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 specific markers. Cultured monocyte-derived dendritic cells do not express CD14, while expressing CD11c, HLA-DR and weakly expressing CD83.

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

Cryopreservation

Cryopreserved products allow for prolonged storage before use. Cell products contain 10% DMSO to minimize cell death during freezing. All cryopreserved products are stored in containers designed and tested for ultra-low temperatures at long time intervals. We normally ship cryopreserved items on dry ice, but can also use a cryoshipper at the customer's request.

Sample Collection and Processing

All samples are collected on-site at our Stem Cell Collection Center. Apheresis donors are transfused with ACD-A during the collection process. Samples are then quickly processed in our on-site laboratory to achieve maximum viability and quality. Cryopreserved cells are frozen at -1°C/minute in a -80°C freezer, and then transferred to liquid nitrogen.

Infectious disease testing for HIV, HBV, and HCV is performed on a sample of donor blood. Only samples with negative results within 90 days of collection are shipped unless approved by the customer. All testing is performed by a CLIA-certified lab.

Format

Isolated cells are normally frozen in CryoStor™ CS10 (10% DMSO). We can also use freezing media as specified by the customer.

Storage

Cryopreserved cells should be maintained at -135°C or colder (in liquid nitrogen). The cells are warrantied for twelve months from the date of receipt if stored at -135°C or colder. Storage of cells at -80°C for less than one month should maintain cell viability but is not covered by the warranty.

Thawing Instructions for Cell Products

Refer to our “How to thaw StemExpress primary cells for optimal viability?” under our Frequently Asked Questions at stemexpress.com/faqs/ to access our online Thawing Protocol.

Warning

This product contains human tissue or other biological material and MUST be handled at Biosafety Level 2 or higher. All biological products should be treated as potentially infectious or contaminated material, even if infectious disease screening reports are negative. Follow universal precautions and wear appropriate personal protective equipment.

Product Warranty

For our product warranty, please review our Terms and Conditions at stemexpress.com/terms-and-conditions/.

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