

Cryopreserved Product

Peripheral Blood CD56+ Natural Killer Cells

Catalog#

PB1400C

5 million cells

Product Description

Human Peripheral Blood CD56+ Natural Killer Cells are negatively selected from peripheral blood mononuclear cells (MNCs).

Peripheral blood mononuclear cells are collected using the Spectra Optia® Apheresis System, which concentrates over 10 billion WBCs from approximately three human blood volumes into a single leukopak. Acid citrate dextrose (ACD-A) is used as the anticoagulant. Mononuclear cells are enriched from the leukopak using an RBC lysis protocol. Cells expressing CD3, CD4, CD14, CD19, CD20, CD36, CD66b, CD123, HLA-DR and CD235a are depleted from the mononuclear cell population using immunomagnetic particles leaving purified, untouched CD56+ natural killer (NK) cells. Positively selected natural killer cells are available as a custom order.

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.

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 warranted for 6 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

StemExpress warrants its fresh products if tested immediately upon receipt and if counted exactly as in the above instructions. The cells are guaranteed to meet specifications for viability, purity, and cell count, also provided the above instructions are followed exactly. StemExpress is not able to guarantee cell performance for any in vitro or in vivo culture system, proliferation assay, functional assay, or implantation.