



Human Peripheral Blood Mononuclear Cells (HPBMC) Specification Sheet

Lifeline’s Human Peripheral Blood Mononuclear Cells (HPBMC) provide an ideal culture model for the study of inflammation and immunity. HPBMC consist of several cell types including T cells, B cells, and monocytes.

Lifeline’s HPBMC are cryopreserved immediately after isolation from collection, via leukapheresis, to ensure optimal function and the highest viability. Our HPBMC are quality tested for viability and cytokine production. Age, gender and race of the donor are provided.

CELL FEATURES:	
•	HPBMC are cryopreserved upon isolation and collection.
•	HPBMC are extensively tested for quality and optimal performance.
•	Lifeline guarantees performance and quality.

Quality Testing for Guaranteed Consistency and Reproducible Results

Lifeline Cell Technology manufactures products using the highest quality raw materials and incorporates extensive quality assurance in every production run. Exacting standards and production procedures ensure consistent performance.

HUMAN PERIPHERAL BLOOD MONONUCLEAR CELLS ARE TESTED FOR:	
• Cell Count	≥50 x 10 ⁶ cryopreserved cells per vial
• Cell Viability	Minimum 80% viability when thawed from cryopreservation
• Sterility Testing	Negative for mycoplasma Negative for bacterial and fungal growth
• Virus Testing	Donors test negative for HIV-1, HIV-2, HBV, and HCV by PCR
• Cytokine Production	Report secretion of TNF-α and IFN-γ in response to: <ul style="list-style-type: none"> • CMV Antigens • <i>E. coli</i> LPS • Phytohemagglutinin • Tetanus toxoid

To place an order, please visit lifelinecelltech.com or call technical and customer service at 877.845.7787.

The Lifeline® Guarantee

Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. All donated tissues have been obtained under proper informed consent. If Lifeline's products do not meet our posted performance and quality standards, we will replace them at no charge or provide a full refund. Upon request, Lifeline will provide lot specific QC test results, material safety data sheets, and certificates of analysis. See complete guarantee/warranty statement at lifelinecelltech.com or contact your Lifeline representative for more information.

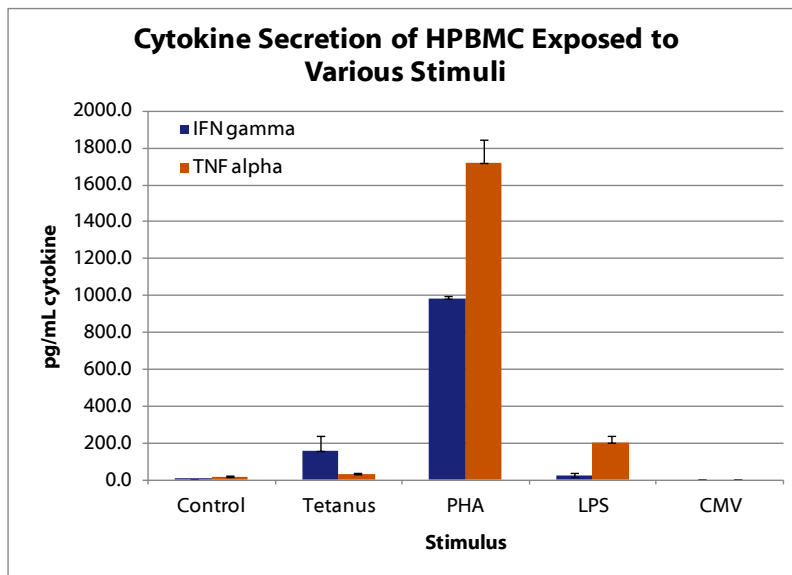
Safety Statement

This product is For Research Use Only. This product is not approved for human or veterinary use, or for use in *in vitro* diagnostic or clinical procedures.

Lifeline recommends storing cryopreserved vials in liquid nitrogen vapor phase. Handle cryopreserved vials with caution. Always wear eye protection and gloves when working with cell cultures. Aseptically vent any nitrogen from cryopreserved vials in a biosafety cabinet prior to thawing the vials in a water bath. If vials must be stored in liquid phase, the vials should be transferred to vapor phase storage or -80°C for up to 24 hours prior to being thawed.

PRODUCT INFORMATION:

Part #	Description
HC-0001	HPBMC, Human Peripheral Blood Mononuclear Cells, $\geq 50 \times 10^6$ cells per vial



Left: Graph showing release of Interferon gamma and tumor necrosis factor alpha from HPBMC exposed to Tetanus toxoid, phytohemagglutinin, E. coli lipopolysaccharide, and cytomegalovirus antigens.

Call Lifeline Technical Service and Sales at 877.845.7787
or visit lifelinecelltech.com for more information

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