

MacroCargo™ Human PBMC-derived Monocytes with Anti-B7-H3 antibody (Viral System, Lentivirus)

Cat. No.: MTS-1222-YF175

This product is for research use only and is not intended for diagnostic use.

Cell Properties

Product Overview	As a therapeutic tool, macrophage cell has a great capacity for delivering cargos because of their intrinsic characteristics. This product is engineered Human PBMC-derived Monocytes carried with Anti-B7-H3 antibody by Viral System-Lentivirus. Macro Cargo™ products aim to improve the macrophage function and delivery of specific cargos. We also provide custom macrophage delivery systems based on your specific requirements.
Cell Name	PBMC-derived Monocytes
Cell Type	Primary Cell
Cell Species	Human
Cell Background	Monocytes express various receptors, which monitor and sense environmental changes. Monocytes are highly plastic and heterogeneous, and change their functional phenotype in response to environmental stimulation. Evidence from murine and human studies has suggested that monocytosis can be an indicator of various inflammatory diseases. Monocytes can differentiate into inflammatory or anti-inflammatory subsets. Upon tissue damage or infection, monocytes are rapidly recruited to the tissue, where they can differentiate into tissue macrophages or dendritic cells.

Cargo Properties

Cargo Type	Checkpoint antibody
Specific Cargo	Anti-B7-H3 antibody
Target Common Name	CD276
Target Alternative Names	B7H3; B7-H3; B7RP-2; 4Ig-B7-H3
Target Full Name	CD276 molecule
Introduction	The protein encoded by this gene belongs to the immunoglobulin superfamily, and is thought to participate in the regulation of T-cell-mediated immune response. Studies show that while the transcript of this gene is ubiquitously expressed in normal tissues and solid tumors, the protein is preferentially expressed only in tumor tissues. Ad

ditionally, it was observed that the 3' UTR of this transcript contains a target site for miR29 microRNA, and there is an inverse correlation between the expression of this protein and miR29 levels, suggesting regulation of expression of this gene product by miR29. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

UniprotID	Q5ZPR3
GeneID	80381
Cargo Delivery System Type	Viral System
Cargo Delivery Approach	Lentivirus

Product Properties

Applications	Enhance the immune system against cancer
References	Marin-Acevedo, Julian A., ErinMarie O. Kimbrough, and Yanyan Lou. "Next generation of immune checkpoint inhibitors and beyond." <i>Journal of hematology & oncology</i> 14 (2021): 1-29. Distributed under Open Access license CC BY 4.0 , without modification.
Mycoplasma Testing	Negative
Sterility Testing	Negative
Shipping	Dry ice
Storage	Frozen cells should be stored in a liquid nitrogen tank (-150°C~-190°C) for long term.
Handling Notes	Frozen cells should be thawed immediately upon receipt and grown according to handling procedure to ensure cell viability and proper assay performance. Note: Do not freeze the cells upon receipt as it may result in irreversible damage to the cell line. Disclaimer: We cannot guarantee cell viability if the cells are not thawed immediately upon receipt and grown according to handling procedure.
Restriction	Research use only