

MacroCargo™ Human Monocyte-derived Macrophages (MDMs) with Anti-B7-H4 antibody (Viral System, Lentivirus)

Cat. No.: MTS-1122-YF334

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 Monocyte-derived Macrophages (MDMs) carried with Anti-B7-H4 antibody by Viral System-Lentivirus. MacroCargo™ 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	Monocyte-derived Macrophages (MDMs)
Cell Type	Primary Cell
Cell Species	Human
Cell Background	The culture of human monocyte-derived macrophages (MDMs) represents a tool to study macrophages, with monocytes known to give rise to tissue macrophages influenced by certain environmental cues.

Cargo Properties

Cargo Type	Checkpoint antibody
Specific Cargo	Anti-B7-H4 antibody
Target Common Name	VTCN1
Target Alternative Names	B7X; B7H4; B7S1; B7-H4; B7h.5; VCTN1; PRO1291
Target Full Name	V-set domain containing T cell activation inhibitor 1
Introduction	This gene encodes a protein belonging to the B7 costimulatory protein family. Proteins in this family are present on the surface of antigen-presenting cells and interact with ligand bound to receptors on the surface of T cells. Studies have shown that high levels of the encoded protein has been correlated with tumor progression. A pseudogene of this gene is located on chromosome 20. Multiple transcript variants encoding different isoforms have been found for this gene.
UniprotID	Q7Z7D3

GeneID [79679](#)

Cargo Delivery System Type Viral System
e

Cargo Delivery Approach Lentivirus

Product Properties

Applications Improve macrophages persist in solid tumors

References Brom, Victoria C., et al. "The role of immune checkpoint molecules on macrophages in cancer, infection, and autoimmune pathologies." *Frontiers in Immunology* 13 (2022): 837645. 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