

MacroCargo™ Human PBMC-derived Macrophages with Anti-CSF-1 antibody (Viral System, Lentivirus)

Cat. No.: MTS-1222-YF40

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 Macrophages carried with Anti-CSF-1 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	PBMC-derived Macrophages
Cell Type	Primary Cell
Cell Species	Human
Cell Background	Macrophages are specialised cells involved in the detection, phagocytosis and destruction of bacteria and other harmful organisms. In addition, they can also present antigens to T cells and initiate inflammation by releasing molecules (known as cytokines) that activate other cells. Furthermore, macrophages are able to cross the biological barriers, penetrate into tumors, and accumulate particularly in hypoxic and poorly vascularized portions of a tumor.

Cargo Properties

Cargo Type	Checkpoint antibody
Specific Cargo	Anti-CSF-1 antibody
Target Common Name	CSF1
Target Alternative Names	MCSF; CSF-1
Target Full Name	colony stimulating factor 1
Introduction	The protein encoded by this gene is a cytokine that controls the production, differentiation, and function of macrophages. The active form of the protein is found extracellularly as a disulfide-linked homodimer, and is thought to be produced by proteolytic cleavage of membrane-bound precursors. The encoded protein may be involved in

development of the placenta. Alternate splicing results in multiple transcript variants.

UniprotID [P09603](#)

GeneID [1435](#)

Cargo Delivery System Type Viral System

Cargo Delivery Approach Lentivirus

Product Properties

Applications Enhance the antitumor effects of immunotherapy; Inhibit TAM differentiation into an M2 phenotype

References Marin-Acevedo, Julian A., ErinMarie O. Kimbrough, and Yanyan Lou. "Next generation of immune checkpoint inhibitors and beyond." *Journal of hematology & oncology* 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