

MacroCargo™ Human PBMC-derived Macrophages with GTR-L gRNA (Viral System, Lentivirus)

Cat. No.: MTS-1122-YF292

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 GTR-L gRNA 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	CRISPR KO
Specific Cargo	GTR-L gRNA
Target Common Name	TNFSF18
Target Alternative Names	TL6; AITRL; GITRL; TNLG2A; hGITRL
Target Full Name	TNF superfamily member 18
Introduction	TL6; AITRL; GITRL; TNLG2A; hGITRL
UniprotID	Q9UNG2
GeneID	8995

Cargo Delivery System Type Viral System

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Cargo Delivery Approach Lentivirus

Product Properties

Applications	Induce anti-tumor macrophage phenotypes
References	Brom, Victoria C., et al. "The role of immune checkpoint molecules on macrophages in cancer, infection, and autoimmune pathologies." <i>Frontiers in Immunology</i> 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