

MacroCargo™ Mouse Bone Marrow-derived Macrophages (BMDM) with PD-L1 gRNA (Viral System, Lentivirus)

Cat. No.: MTS-1122-YF78

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 Mouse Bone Marrow-derived Macrophages (BMDM) carried with PD-L1 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	Bone Marrow-derived Macrophages (BMDM)
Cell Type	Primary Cell
Cell Species	Mouse
Cell Background	The broad use of transgenic and gene-targeted mice has established bone marrow-derived macrophages (BMDM) as important mammalian host cells for investigation of the macrophages biology.

Cargo Properties

Cargo Type	CRISPR KO
Specific Cargo	PD-L1 gRNA
Target Common Name	CD274
Target Alternative Names	B7-H; B7H1; PDL1; PD-L1; hPD-L1; PDCD1L1; PDCD1LG1
Target Full Name	CD274 molecule

Introduction This gene encodes an immune inhibitory receptor ligand that is expressed by hematopoietic and non-hematopoietic cells, such as T cells and B cells and various types of tumor cells. The encoded protein is a type I transmembrane protein that has immunoglobulin V-like and C-like domains. Interaction of this ligand with its receptor inhibits T-cell activation and cytokine production. During infection or inflammation of normal tissue, this interaction is important for preventing autoimmunity by maintaining homeostasis of the immune response. In tumor microenvironments, this interaction provides an immune escape for tumor cells through cytotoxic T-cell inactivation. Exp

ression of this gene in tumor cells is considered to be prognostic in many types of human malignancies, including colon cancer and renal cell carcinoma. Alternative splicing results in multiple transcript variants.

UniprotID	Q9NZQ7
GeneID	29126
Cargo Delivery System Type	Viral System
Cargo Delivery Approach	Lentivirus

Product Properties

Applications	Resistant to reprogramming by tumor-secreted signals
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