

## MacroCargo™ Mouse J774 with CD73 gRNA (Viral System, Lentivirus)

Cat. No.: MTS-1122-YF475

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 J774 carried with CD73 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	J774
Cell Type	Cell Line
Cell Species	Mouse
Cell Background	Mouse mononuclear macrophages J774A.1 is a cell line isolated in 1968 from the ascites of an adult, female mouse with reticulum cell sarcoma. This cell line can be used in immunology research.

### Cargo Properties

Cargo Type	CRISPR KO
Specific Cargo	CD73 gRNA
Target Common Name	NT5E
Target Alternative Names	NT; eN; NT5; NTE; eNT; CD73; E5NT; CALJA
Target Full Name	5'-nucleotidase ecto
Introduction	The protein encoded by this gene is a plasma membrane protein that catalyzes the conversion of extracellular nucleotides to membrane-permeable nucleosides. The encoded protein is used as a determinant of lymphocyte differentiation. Defects in this gene can lead to the calcification of joints and arteries. Two transcript variants encoding different isoforms have been found for this gene.
UniprotID	<a href="#">P21589</a>
GeneID	<a href="#">4907</a>
Cargo Delivery System Type	Viral System

## Product Properties

Applications	Prevent cancer cells from evading immune clearance
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 <a href="https://creativecommons.org/licenses/by/4.0/">CC BY 4.0</a> , 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