

MacroCargo™ Mouse RAW264.7 with Anti-A2aR antibody (Viral System, Lentivirus)

Cat. No.: MTS-1222-YF272

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 RAW264.7 carried with Anti-A2aR 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	RAW264.7
Cell Type	Cell Line
Cell Species	Mouse
Cell Background	RAW 264.7 is a macrophage cell line that was established from a tumor in a male mouse induced with the Abelson murine leukemia virus.

Cargo Properties

Cargo Type	Checkpoint antibody
Specific Cargo	Anti-A2aR antibody
Target Common Name	ADORA2A
Target Alternative Names	A2aR; RDC8; ADORA2
Target Full Name	adenosine A2a receptor
Introduction	This gene encodes a member of the guanine nucleotide-binding protein (G protein)-coupled receptor (GPCR) superfamily, which is subdivided into classes and subtypes. The receptors are seven-pass transmembrane proteins that respond to extracellular cues and activate intracellular signal transduction pathways. This protein, an adenosine receptor of A2A subtype, uses adenosine as the preferred endogenous agonist and preferentially interacts with the G(s) and G(olf) family of G proteins to increase intracellular cAMP levels. It plays an important role in many biological functions, such as cardiac rhythm and circulation, cerebral and renal blood flow, immune function, pain regulation, and sleep. It has been implicated in pathophysiological conditions such as inflammatory diseases and neurodegenerative disorders. Alternative splicing results in multiple transcript variants. A read-through transcript composed of th

e upstream SPECC1L (sperm antigen with calponin homology and coiled-coil domains 1-like) and ADORA2A (adenosine A2a receptor) gene sequence has been identified, but it is thought to be non-coding.

UniprotID	P29274
GeneID	135
Cargo Delivery System Type	Viral System
Cargo Delivery Approach	Lentivirus

Product Properties

Applications	Enhance the immune system against cancer
References	Marin-Acevedo, Julian A., ErinMarie O. Kimbrough, and Yanyan Lou. "Next generation of immune checkpoint inhibitors and beyond." <i>Journal of hematology & oncology</i> 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