
MacroCargo™ Mouse RAW264.7 with pDNA encoding IL-1 α (Nanoparticle System, Magnetic cationic liposomes)

Cat. No.: MTS-1222-YF259

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 pDNA encoding IL-1 α by Nanoparticle System-Magnetic cationic liposomes. 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	Cytokine
Specific Cargo	pDNA encoding IL-1 α
Cargo Common Name	IL1A
Cargo Alternative Names	IL1; IL-1A; IL1F1; IL1-ALPHA; IL-1 alpha
Cargo Full Name	Interleukin 1 alpha

Introduction The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine is a pleiotropic cytokine involved in various immune responses, inflammatory processes, and hematopoiesis. This cytokine is produced by monocytes and macrophages as a proprotein, which is proteolytically processed and released in response to cell injury, and thus induces apoptosis. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. It has been suggested that the polymorphism of these genes is associated with rheumatoid arthritis and Alzheimer's disease.

UniprotID [P01583](https://www.uniprot.org/uniprot/P01583)

GeneID [3552](#)

Cargo Delivery System Type Nanoparticle System
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Cargo Delivery Approach Magnetic cationic liposomes

Nanoparticle Component DOTAP, DSPC, cholesterol, iron oxide (II, III).

Product Properties

Applications Improve the delivery of macrophages to tumors and its therapeutic efficacy against inflammatory diseases

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