
MacroCargo™ Mouse RAW264.7 with pDNA encoding IL-18 (Nanoparticle System, Magnetic cationic liposomes)

Cat. No.: MTS-1222-YF260

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-18 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-18
Cargo Common Name	IL18
Cargo Alternative Names	IGIF; IL-18; IL-1g; IL1F4
Cargo Full Name	Interleukin 18

Introduction The protein encoded by this gene is a proinflammatory cytokine of the IL-1 family that is constitutively found as a precursor within the cytoplasm of a variety of cells including macrophages and keratinocytes. The inactive IL-18 precursor is processed to its active form by caspase-1, and is capable of stimulating interferon gamma production, and of regulating both T helper (Th) 1 and Th2 responses. This cytokine has been implicated in the injury of different organs, and in potentially fatal conditions characterized by a cytokine storm. In humans, IL-18 gene is located on chromosome 11. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

UniprotID	Q14116
GeneID	3606
Cargo Delivery System Type	Nanoparticle System
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