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MacroCargo™ Mouse RAW264.7 with pDNA encoding IL-21 (Nanoparticle System, Magnetic cationic liposomes)

Cat. No.: MTS-1222-YF254

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 be cause of their intrinsic characteristics. This product is engineered Mouse RAW264.7 carried with pDNA encoding IL-21 by Nanoparticle System-Magnetic cationic liposo mes. 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 m ouse induced with the Abelson murine leukemia virus.

Cargo Properties

Cargo Type	Cytokine
Specific Cargo	pDNA encoding IL-21
Cargo Common Name	IL21
Cargo Alternative Names	Za11; IL-21; CVID11
Cargo Full Name	Interleukin 21
Introduction	This gene encodes a member of the common-gamma chain family of cytokines with i mmunoregulatory activity. The encoded protein plays a role in both the innate and a daptive immune responses by inducing the differentiation, proliferation and activity of multiple target cells including macrophages, natural killer cells, B cells and cytoto xic T cells. Dysregulation of this gene plays a role in multiple immune-mediated dise ases including lupus, psoriasis and chronic inflammatory diseases. Alternatively spli ced transcript variants encoding multiple isoforms have been observed for this gen e.
UniprotID	Q9HBE4

GeneID	59067
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