SUITE 203, 17 Ramsey Road, Shirley, NY 11967, USA
Tel: 1-631-416-1478 Fax: 1-631-207-8356
info@creative-biolabs.com
macrophage.creative-biolabs.com

MacroCargo™ Human Monocyte-derived Macrophages (MDMs) with pDNA encoding IL-18 (Nanoparticle System, Magnetic cationic liposomes)

Cat. No.: MTS-1222-YF68

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 Human Monocyte-derived Macrophages (MDMs) carried with pDNA encoding IL-18 by Nanoparticle Sy stem-Magnetic cationic liposomes. MacroCargo™ products aim to improve the macr ophage function and delivery of specific cargos. We also provide custom macrophag e delivery systems based on your specific requirements.
Cell Name	Monocyte-derived Macrophages (MDMs)
Cell Type	Primary Cell
Cell Species	Human
Cell Background	The culture of human monocyte-derived macrophages (MDMs) represents a tool to s tudy macrophages, with monocytes known to give rise to tissue macrophages influe nced by certain environmental cues.

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 th at is constitutively found as a precursor within the cytoplasm of a variety of cells inc luding macrophages and keratinocytes. The inactive IL-18 precursor is processed to its active form by caspase-1, and is capable of stimulating interferon gamma produc tion, and of regulating both T helper (Th) 1 and Th2 responses. This cytokine has b een implicated in the injury of different organs, and in potentially fatal conditions ch aracterized by a cytokine storm. In humans, IL-18 gene is located on chromosome 1

	1. 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