

## MacroCargo™ Mouse Ana-1 with pDNA encoding IL-23 (Nanoparticle System, Magnetic cationic liposomes)

Cat. No.: MTS-1222-YF306

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 Ana-1 carried with pDNA encoding IL-23 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	Ana-1
Cell Type	Cell Line
Cell Species	Mouse
Cell Background	Ana-1 is a macrophage cell line, isolated from mouse thymus.

### Cargo Properties

Cargo Type	Cytokine
Specific Cargo	pDNA encoding IL-23
Cargo Common Name	IL23
Cargo Alternative Names	IL23; IL-23; Interleukin 23
Cargo Full Name	Interleukin 23

**Introduction** Interleukin-23 (IL-23) is a pro-inflammatory cytokine composed of two subunits, p19 and p40. The p40 subunit is shared with IL-12. IL-23 is involved in differentiation of Th17 cells in a pro-inflammatory context and especially in the presence of TGF- $\beta$  and IL-6. Inflammatory macrophages express IL-23R and are activated by IL-23 to produce IL-1, TNF- $\alpha$ , and IL-23 itself. These effects identify IL-23 as a central cytokine in autoimmunity and a highly promising treatment target for inflammatory diseases.

GeneID

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