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## MacroCargo™ Mouse Ana-1 with IL-18 (Viral System, Lentivirus)

Cat. No.: MTS-1122-YF455

**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 IL-18 by Viral System-Lentivirus. 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	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	<a href="#">Q14116</a>
GeneID	<a href="#">3606</a>

Cargo Delivery System Typ Viral System

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Cargo Delivery Approach Lentivirus

## Product Properties

Applications	Positive regulator of M1 polarization of macrophage; Improve survive
References	Brom, Victoria C., et al. "The role of immune checkpoint molecules on macrophages in cancer, infection, and autoimmune pathologies." <i>Frontiers in Immunology</i> 13 (2022): 837645. Distributed under Open Access license <a href="https://creativecommons.org/licenses/by/4.0/">CC BY 4.0</a> , without modification.
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