

## MacroCargo™ Human PBMC-derived Macrophages with Nanoparticle System, PEGylated gold-based nanoparticles

Cat. No.: MTS-1222-YF510

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 Human PBMC-derived Macrophages carried with Nanoparticle System-PEGylated gold-based nanoparticles. 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	PBMC-derived Macrophages
Cell Type	Primary Cell
Cell Species	Human
Cell Background	Macrophages are specialised cells involved in the detection, phagocytosis and destruction of bacteria and other harmful organisms. In addition, they can also present antigens to T cells and initiate inflammation by releasing molecules (known as cytokines) that activate other cells. Furthermore, macrophages are able to cross the biological barriers, penetrate into tumors, and accumulate particularly in hypoxic and poorly vascularized portions of a tumor.

### Cargo Properties

Cargo Delivery System Type Nanoparticle System

Cargo Delivery Approach PEGylated gold-based nanoparticles

Nanoparticle Component Silica core with gold shell

### Product Properties

Applications Photothermal therapy

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