

MacroCargo™ Human Monocyte-derived Macrophages (MDMs) with Neurturin (Transfection System, GenePORTER 3000)

Cat. No.: MTS-1122-YF57

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 Monocyte-derived Macrophages (MDMs) carried with Neurturin by Transfection System-GenePORTER 3000. 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	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 study macrophages, with monocytes known to give rise to tissue macrophages influenced by certain environmental cues.

Cargo Properties

Cargo Type	Protein
Specific Cargo	Neurturin
Cargo Common Name	NRTN
Cargo Alternative Names	NTN
Cargo Full Name	Neurturin
Introduction	This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. The encoded preproprotein is proteolytically processed to generate the mature protein. This protein signals through the RET receptor tyrosine kinase and a GPI-linked coreceptor, and promotes survival of neuronal populations. A neurturin mutation has been described in a family with Hirschsprung Disease.
UniprotID	Q99748
GeneID	4902

Cargo Delivery System Type Transfection System

e

Cargo Delivery Approach GenePORTER 3000

Product Properties

Applications	Provide significant neuronal protection in Parkinson's disease
References	Zhao, Yuling, et al. "GDNF-transfected macrophages produce potent neuroprotective effects in Parkinson's disease mouse model." <i>PloS one</i> 9.9 (2014): e106867. Distributed under Public Domain .
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