

MANF/ARMET/ARP (C-6His), Human, Recombinant

Cat. No. : PCK209

General Information

Synonyms	Mesencephalic astrocyte-Derived neurotrophic factor;Arginine-rich Protein;Protein ARMET; ARMET;ARP
Species	Human
Expression host	Human Cells
Sequence	Leu25-Leu182
Accession	P55145
Tag	C-6His
Mol mass	18.99 kDa
Expiration date	12 months

Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Background

Mesencephalic astrocyte-Derived neurotrophic factor (MANF) is a secreted Protein which belongs to the ARMET family. MANF selectively promotes the survival of dopaminergic neurons of the ventral mid-brain. It modulates GABAergic transmission to the dopaminergic neurons of the substantia nigra. MANF enhances spontaneous, as well as evoked, GABAergic inhibitory postsynaptic currents in dopaminergic neurons. MANF inhibits cell proliferation and endoplasmic reticulum (ER) stress-induced cell death. The N-terminal region of ARMET may be responsible for neurotrophic activity while the C-terminal region may play a role in the ER stress response. MANF reduces endoplasmic reticulum (ER) stress and has neurotrophic effects on dopaminergic neurons. Intracortical delivery of recombinant MANF Protein protects tissue from ischemic brain injury. MANF has been described as a survival factor for dopaminergic neurons. MANF and a homologous Protein, the conserved dopamine neurotrophic factor (CDNF), form a novel evolutionary conserved family of neurotrophic factors. MANF expression was widespread in the nervous system and non-neuronal tissues.