

Summary

Name	ARMET/MANF
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/ μ g as determined by LAL test.
Construction	Recombinant Human Mesencephalic Astrocyte-derived Neurotrophic Factor is produced by our Mammalian expression system and the target gene encoding Leu25-Leu182 is expressed with a 6His tag at the C-terminus.
Accession #	P55145
Host	Human Cells
Species	Human
Predicted Molecular Mass	18.99 KDa
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Lyophilized protein should be stored at \leq -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SDS-PAGE image



Background



Mesencephalic astrocyte-derived neurotrophic factor; Arginine-rich protein; Alternative Names Protein ARMET; ARMET; ARP Mesencephalic astrocyte-derived neurotrophic factor(MANF) is a secreted protein Background 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.

Note For Research Use Only , Not for Diagnostic Use.