



Recombinant Protein Technical Manual
Recombinant Human MANF/ARMET Protein (Fc Tag)
RPES3707

Product Data:

Product SKU: RPES3707

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_006001.4

Protein Information:

Molecular Mass: 44.9 kDa

AP Molecular Mass:

Tag: C-Fc

Bio-activity:

Purity: >(86.6+6.8) % as determined by reducing SDS-PAGE. .

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: ARMET;ARP;MAP 1D;MAP1D;MetAP 1D;Metap1l

Immunogen Information:

Sequence: Met 1-Leu182

Background:

Mesencephalic astrocyte-derived neurotrophic factor, also known as Protein ARMET, Arginine-rich protein, MANF and ARMET, is a secreted protein which belongs to the ARMET family. ARMET selectively promotes the survival of dopaminergic neurons of the ventral mid-brain. It modulates GABAergic transmission to the dopaminergic neurons of the substantia nigra. ARMET enhances spontaneous, as well as evoked, GABAergic inhibitory postsynaptic currents in dopaminergic neurons. ARMET 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 expression was widespread in the nervous system and non-neuronal tissues. In the brain, relatively high MANF levels were detected in the cerebral cortex, hippocampus and cerebellar Purkinje cells. The widespread expression of MANF together with its evolutionary conserved nature and regulation by brain insults suggest that it has important functions both under normal and pathological conditions in many tissue types.