# Recombinant Human MANF/ARMET Protein (His Tag)

**Catalog Number:PKSH032734**

***Note:*** Centrifuge before opening to ensure complete recovery of vial contents.

## Description

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|---|---|
| **Synonyms** | Mesencephalic astrocyte-derived neurotrophic factor;Arginine-rich protein;Protein ARMET;ARMET;ARP |
| **Species** | Human |
| **Expression Host** | HEK293 Cells |
| **Sequence** | Leu25-Leu182 |
| **Accession** | P55145 |
| **Calculated Molecular Weight** | 19.0 kDa |
| **Observed molecular weight** | 17 kDa |
| **Tag** | C-His |

## Properties

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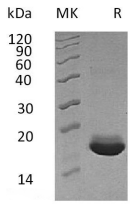
|---|---|
| **Purity** | > 95 % as determined by reducing SDS-PAGE. |
| **Endotoxin** | < 1.0 EU per μg of the protein as determined by the LAL method. |
| **Storage** | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months. |
| **Shipping** | This product is provided as lyophilized powder which is shipped with ice packs. |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution of 20mM PB,150mM NaCl,pH7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual |
| **Reconstitution** | Please refer to the printed manual for detailed information. |

## Data




> 95 % as determined by reducing SDS-PAGE.

## 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.



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