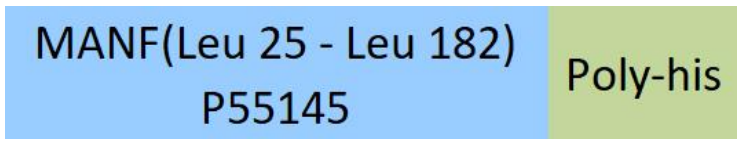
Synonym

Mesencephalic astrocyte-derived neurotrophic factor,Arginine-Rich Protein,arginine-rich, mutated in early stage tumors,ARMET,ARP,MANF,mesencephalic astrocyte-derived neurotrophic facto,Protein ARMET

Source

Human MANF Protein, His Tag(MAF-H52H3) is expressed from human 293 cells (HEK293). It contains AA Leu 25 - Leu 182 (Accession # P55145). Predicted N-terminus: Leu 25

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 20.0 kDa. The protein migrates as 19-21 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per μg by the LAL method.

Sterility

Negative

Mycoplasma

Negative.

Purity

>95% as determined by SDS-PAGE.

>98% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

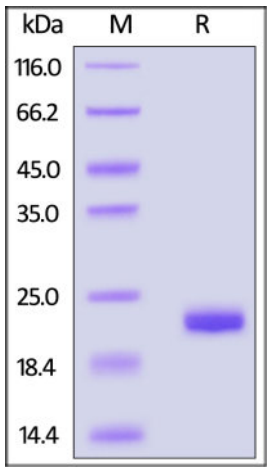
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

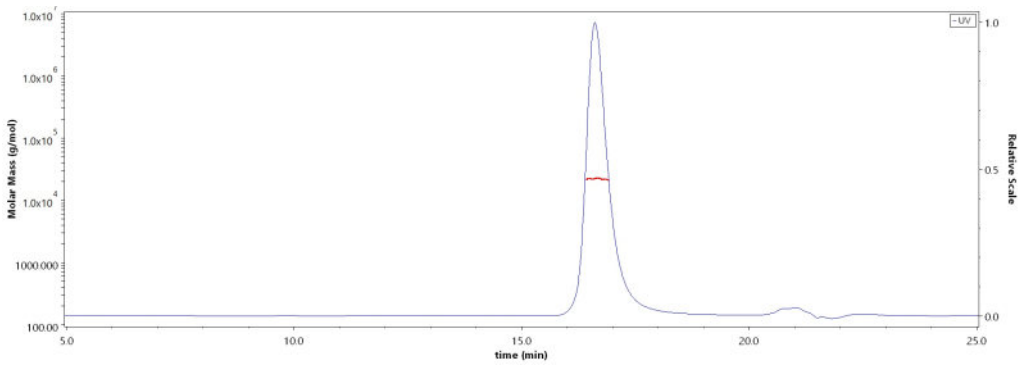
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human MANF Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Human MANF Protein, His Tag (Cat. No. MAF-H52H3) is more than 98% and the molecular weight of this protein is around 18-26 kDa verified by SEC-MALS.
Report

Background

MANF is a secreted neurotrophic factor that is expressed in brain, neuronal and certain non-neuronal tissues. It has been shown to promote the survival, growth and function of dopamine-specific neurons. MANF and its structural homolog CDNF each contain a N-terminal, saposin-like, lipid-binding domain, and a carboxyl-terminal domain that is not homologous to previously characterized protein structures. MANF and CDNF can prevent 6-OHDA-induced degeneration of dopaminergic neurons by triggering survival pathways in a rat experimental model of Parkinson's disease. Recombinant Human MANF is an 18.1 kDa protein consisting of 158 amino acids, including 8 cysteine residues.

Clinical and Translational Updates