Recombinant Human MANF protein

Cat. No. MANF-536H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human MANF protein was expressed in Escherichia coli.
Species	Human
Source	E.coli
ProteinLength	158
Description	MANF is a secreted neurotrophic factor that is expressed in brain, neuronal and certain non-neuronal tissues. It has been shown to promote survival, growth and function of dopamine specific neurons. MANF and its structural homolog CDNF, each contain an N-terminal saposin-like lipid binding domain, and a carboxyl-terminal domain, which 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 disease. Mature human MANF is 99 %, 98 % and 96 % a.a. identical to mature rat, mouse and bovine MANF respectively.
Form	Lyophilized from a 0.2μm filtered concentrated solution in PBS, pH 7.4.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using rat C6 cells is less than 20 μg/ml, corresponding to a specific activity of > 50 IU/mg.
Molecular Mass	Approximately 18.2 kDa, a single non-glycosylated polypeptide chain containing158

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	amino acids.
AA Sequence	LRPGDCEVCISYLGRFYQDLKDRDVTFSPATIENELIKFCREARGKENRLCYYIGATD DAATKIINEVSKPLAHHIPVEKICEKLKKKDSQICELKYDKQIDLSTVDLKKLRVKELKKI LDDWGETCKGCAEKSDYIRKINELMPKYAPKAASARTDL
Endotoxin	Less than 1 EU/μg of rHuMANF as determined by LAL method.
Purity	>95% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	MANF
Official Symbol	MANF
Synonyms	MANF; mesencephalic astrocyte-derived neurotrophic factor; arginine rich, mutated in early stage tumors , ARMET; ARP; arginine-rich, mutated in early stage tumors; ARMET; MGC142148; MGC142150;

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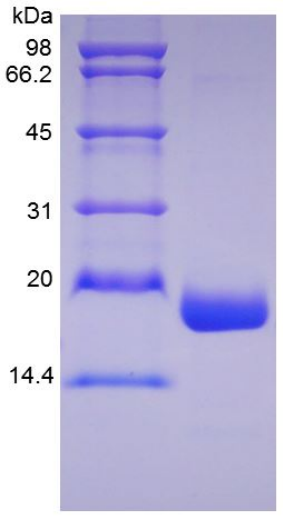
Gene ID	7873
mRNA Refseq	NM_006010
Protein Refseq	NP_006001
MIM	601916
UniProt ID	P55145
SDS-PAGE of MANF-536H	

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