

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

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 CDFN 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 has been identified as a soluble ER stress protein induced by the unfolded protein response. MANF and CDFN can prevent 6-OHDA induced degeneration of dopaminergic neurons by triggering survival pathways, as shown in a rat experimental model of Parkinson disease.

Catalog Number	1170-15
Product Name	MANF, Human Recombinant Human Mesencephalic Astrocyte-derived Neurotrophic Factor (MANF) Arginine-Rich, Mutated in Early Stage Tumors (ARMET) Arginine-Rich Protein (ARP)
Source	<i>Escherichia coli</i>
MW	~18.2 kDa (158 amino acids)
Sequence	LRPGDCEVCI SYLGRFYQDL KDRDVTFSPA TIENELIKFC REARGKENRL CYIGATDDA ATKIINEVSK PLAAHHPVEK ICEKLKKKDS QICELKYDKQ IDLSTVDLKK LRVKELKKIL DDWGETCKGC AEKSDYIRKI NELMPKYAPK AASARTDL
Accession Number	P55145
Purity	>97% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ 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.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.