Recombinant Mouse Nerve Growth Factor

Cat. No. Ngf-662M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Ngfis a monomeric protein consisting of two 118 amino acid residue subunits, andmigrates as an approximately 13 kDa protein under non-reducing and reducingconditions in SDS-PAGE, and was lyophilized from a 0.2 μm filtered solutionin 10mM sodium acetate, pH 5.5.
Species	Mouse
Source	Mouse
Description	NGF is mainlyresponsible for the survival and the differentiation and the functionalactivities of sensory and sympathetic neurons in the peripheral nervous system.It also plays an important role in the development and functional activitiesof cholinergic neurons in the central nervous system. Since NGF issynthesized also in non-neuronal tissues it may have a much wider spectrum ofbiological activities than thought previously. NGF stimulates chemotacticmigration of human polymorphonuclear leukocytes in vitro.
Purity	>95%, asdetermined by SDS-PAGE and HPLC.
Sequence	MSMLFYTLITAFLIGVQAEP YTDSNVPEGD SVPEAHWTKL QHSLDTALRR ARSAPTAPIA ARVTGQTRNI TVDPRLFKKRRLHSPRVLFS TQPPPTSSDT LDLDFQAHGT IPFNRTHRSK RSSTHPVFHM GEFSVCDSVS VWVGDKTTATDIKGKEVTVL AEVNINNSVF RQYFFETKCR ASNPVESGCR GIDSKHWNSY CTTTHTFVKA LTTDEKQAAWRFIRIDTACV CVLSRKATRR G

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Weight	Native Mouse Ngf isgenerated by the proteolytic removal of the signal peptide and propeptide themolecule has a calculated molecular mass of approximately 27 kDa.
Biological Activity	TheED (50) was determined by the determined by its ability to stimulate chick E9DRG neurite outgrowth was found to be in the range of 1.0 ng/ml.
Endotoxin	Endotoxin contentwas assayed using a LAL gel clot method. Endotoxin level was found to be lessthan 0.1 ng/g(1EU/g).
Reconstitution	A quick spin of thevial followed by reconstitution in distilled water to a concentration notless than 0.1 mg/mL. This solution can then be diluted into other buffers.
Storage	The lyophilized protein is stable forat least 2 years from date of receipt at -20°C. Upon reconstitution, thiscytokine can be stored in working aliquots at 2°C - 8°C for one month, or at-20°C for six months, with a carrier protein without detectable loss ofactivity. Avoid repeated freeze/thaw cycles.
OfficialSymbol	Ngf
Pathways	ARMS-mediatedactivation; Activation of TRKA receptors; Apoptosis; Axonal growth stimulation;Ceramide signaling; Id Signaling Pathway; MAPK signaling pathway; NGFprocessing; Neurotrophin signaling pathway; PI3K/AKT activation; PLC-gamma1signalling; Signalling by NGF; Signalling to ERKs; Signalling to RAS; Signallingto STAT3

GENE INFORMATION

Gene Name	Ngf nerve growth factor [Mus musculus]
Synonyms	Ngf; nerve growth factor; Ngfb; beta-nervegrowth factor; beta-NGF; nerve growth factor, beta

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	18049
mRNA Refseq	NM_013609
Protein Refseq	NP_038637
UniProt ID	P01139
Function	growthfactor activity; nerve growth factor receptor binding; receptor binding; receptorsignaling protein activity
Renderingof NGF from PDB 1SG1	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA