



## Neurturin Recombinant Protein

CATALOG NUMBER: 40-500

### Specifications

<b>SPECIES:</b>	Human
<b>SOURCE SPECIES:</b>	E. coli
<b>SEQUENCE:</b>	MARLGARPCG LRELEVRVSE LGLGYASDET VLFYRCAGAC EAAARVYDLG LRRLRQRRRL RRERVRAQPC CRPTAYEDEV SFLDAHSRYH TVHELSAREC ACV
<b>TESTED APPLICATIONS:</b>	
<b>BIOLOGICAL ACTIVITY:</b>	Human Neurturin at a concentration of 100 ng/mL will support the survival of 65% of newborn rat sympathetic neurons.

### Properties

<b>PURITY:</b>	Greater than 98% by SDS-PAGE gel and HPLC analyses.  Endotoxin level is less than 0.1 ng per ug (1EU/ug).
<b>PHYSICAL STATE:</b>	Lyophilized
<b>STORAGE CONDITIONS:</b>	The lyophilized Neurturin recombinant protein is stable for at least 2 years from date of receipt at -20°C. Reconstituted Neurturin is stable for at least 3 months when stored in working aliquots with a carrier protein at -20°C. As with any protein, exposing Neurturin recombinant protein to repeated freeze / thaw cycles is not recommended. When working with proteins care should be taken to keep recombinant protein at a cool and stable temperature.

### Additional Info

<b>ALTERNATE NAMES:</b>	NTN, Neurturin
<b>ACCESSION NO.:</b>	NP_004549.1
<b>PROTEIN GI NO.:</b>	4758826

### Background

Neurturin is a disulfide-linked homodimer neurotrophic factor structurally related to GDNF, Artemin, and Persephin. These proteins belong to the cysteine-knot family of growth factors that assume stable dimeric structures. Neurturin signals through a multicomponent receptor system, composed of RET and one of four GFR alpha (alpha1-alpha4) receptors. Neurturin promotes the development and survival of sympathetic and sensory neurons by signaling through a receptor system composed of RET and GFRalpha2. The functional form of human Neurturin is a disulfide-linked homodimer, of two 11.8 kDa polypeptide monomers (206 total amino acid residues). Each monomer contains seven conserved cysteine residues, one of which (Cys 69) is used for inter-chain disulfide bridging and the others are involved in intramolecular ring formation known as the cysteine knot configuration.

**FOR RESEARCH USE ONLY**

December 13, 2016