

Recombinant Human Neurturin (NTN)

Product Description

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 α (α 1- α 4) receptors. Neurturin promotes the development and survival of sympathetic and sensory neurons by signaling through a receptor system composed of RET and GFR α 2. The functional form of human neurturin is a disulfide-linked homodimer, of two 11.8 kDa polypeptide monomers (204 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 the intramolecular ring formation known as the cysteine knot configuration.

Typical Specifications

Species	Human
Expression	E. coli Cell Expressed
Purity	≥98%
Endotoxin	<1.0 EU/μg
Molecular Mass	11.8 kDa, homodimer
Formulation	10 mM Sodium Citrate, pH 4.0.
Country of Origin	USA

Purity Confirmation

This was determined by SDS-PAGE gel and HPLC analysis.

Activity Assay

Human Neurturin at a concentration of 100 ng/ml will support the survival of 65% of newborn rat sympathetic neurons.

AA Sequence

ARLGARPCGL	RELEVRVSEL	GLGYASDETV
LFRYCAGACE	AAARVYDLGL	RRLRQRRRLR
RERVRAQPCC	RPTAYEDEVS	FLDAHSRYHT
VHELSARECA	CV	

Reconstitution Buffer

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex.

Storage

For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% HSA) and store in working aliquots at -20°C to -80°C.

Limited Use and Restrictions

Unless otherwise stated in our catalog or other company documentation accompanying the product, products sold by HumanZyme, Inc. are intended for research use only and are not to be used for any other purpose, which includes but is not limited to, unauthorized commercial uses, including resale or use in manufacture, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses or any type of consumption or application to humans or animals. For a complete statement of this Limited Use License and its application to drug discovery and diagnostic research, please visit www.humanzyme.com.