

Recombinant Human NT-3 (Neurotrophin-3)

Product Description

NT-3 is a neurotrophic factor structurally related to β -NGF, BDNF, and NT-4. These proteins belong to the cysteine-knot family of growth factors that assume stable dimeric structures. NT-3 is expressed by neurons of the central nervous systems, and can signal through the trk receptors. NT-3 promotes the growth and survival of nerve and glial cells. The amino acid sequences of human, murine and rat NT-3 are identical. Recombinant Human NT-3 is a noncovalently linked homodimer of two 13.6 kDa polypeptide monomers (240 total amino acid residues).

Typical Specifications

Species	Human
Expression	E. Coli Cell Expressed
Activity	Typically 20-50 ng/ml ED ₅₀
Purity	≥98%
Endotoxin	<1.0 EU/ μ g
Molecular Mass	13.6 kDa
Country of Origin	USA

Purity Confirmation

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

Activity Assay

The ED₅₀ as determined by the dose-dependent induction of choline acetyl transferase activity in rat basal forebrain primary septal cell cultures was found in the range of 20-50 ng/ml.

AA Sequence

MYAEHKSHRG	EYSVCDSESL	WVTDKSSAID
IRGHQVTVLG	EIKTGNPVK	QYFYETRCKE
ARPVKNGCRG	IDDKHWNSQC	KTSQTYVRAL
TSENNKLVGW	RWIRIDTSCV	CALSRKIGRT

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

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