

Product Usage

930 Riverside Parkway, Suite 50 • West Sacramento, CA 95605 800.543.6464 • gembio.com

Product: Recombinant Human Neurotrophin-4 / NT-4

Cat #: 300-204P

Powder

Description Neurotrophin-4 (NT-4) is an important member of the nerve growth factor (NGF)

family of proteins along with NT-3, BDNF and NGF. Neurotrophins act in a paracrine and/or autocine manner to control neuronal numbers and dendrite outgrowth. These functions are thought to be communicated by TrkB, a receptor tryrosine kinase that

NT-4 shares with BDNF. Alternate names: NT-4/5, Neurotrophin 5, NT-5,

Neurotrophic Factor

MW Non-glycosylated, non-covalently linked homodimer, containing two 131 amino acid

chains, with a total molecular weight of 28.1 kDa.

Physical Appearance Sterile filtered white lyophilized (freeze-dried) powder.

Source E. coli

Formulation Recombinant human NT-4 is lyophilized with no additives.

Reconstitution Centrifuge vial before opening. When reconstituting the product, gently pipet and

wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous

solutions.

Stability Lyophilized product is very stable at -20°C. Reconstituted material should be

aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA

or BSA) is added for long term storage.

Biological Activity

The activity is determined by the dose-dependent proliferation of C6 cells and is

typically in the range of 1-5 µg/mL.

Endotoxin Level Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein.

AA Sequence MGVSETAPAS RRGELAVCDA VSGWVTDRRT AVDLRGREVE VLGEVPAAGG

SPLRQYFFET RCKADNAEEG GPGAGGGGCR GVDRRHWVSE CKAKQSYVRA

LTADAQGRVG WRWIRIDTAC VCTLLSRTGR A

Purity greater than 97% determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

Protein content determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!