

**BACKGROUND:**

Neurotrophin-4 (NT-4) is an important member of the nerve growth factor (NGF) family of proteins. Neurotrophins undergo paracrine and autocrine signaling to control neuronal survival, neuronal differentiation, and dendrite outgrowth. NT-4 is expressed ubiquitously and signals through the TrkB receptor tyrosine kinase.

Recombinant human Neurotrophin-4 is a non-glycosylated protein dimer, containing 131/262 amino acids and having a molecular mass of 14.0/28.1 kDa.

**Cat. No.:**

RP1033

**Alternate Names:**

NT-4/5, Neurotrophin 5, NT-5, Neurotrophic Factor

**AA Sequence:**

MGVSETAPAS	RRGELAVCDA	VSGWVTDRT
AVDLRGREVE	VLGEVPAAGG	SPLRQYFFET
RCKADNAEEG	GPGAGGGGCR	GVDRRHWVSE
CKAKQSYVRA	LTADAQGRVG	WRWIRIDTAC
VCTLLSRTGR	A	

**TECHNICAL INFO****Source:***E. coli***Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**

0.1% Trifluoroacetic Acid (TFA)

**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.

**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 0.1 mg/mL, which can be further diluted into other aqueous solutions.

**Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Biological Activity:**

The activity is measured by dose-dependent C6 cell proliferation, with Bioactivity Acceptance Criteria ED50 at 3 ug/mL.

