

Recombinant Human NT-4 Protein

Product Information

Product Name	Cat#	Size
Recombinant Human NT-4 Protein	92114ES05	2 µg
	92114ES10	10 µg
	92114ES50	50 µg
	92114ES60	100 µg

Product Description

Neurotrophin-4 (NT-4), is a member of the NGF family of neuronal and epithelial growth factors. Neurotrophins have six conserved cysteine residues that are involved in the formation of three disulfide bonds. Mature human NT-4 shares 91% and 95% aa sequence identity with mouse and rat NT-4/5, respectively. The mature protein is secreted as a homodimer and can also form heterodimers with BDNF or NT-3. NT-4 binds and induces receptor dimerization and activation of TrkB. NT-4 promotes the development and survival of selected peripheral and CNS neurons.

Product Properties

Synonyms	Neurotrophin-5, NT-5; Neurotrophin-4 ;GLC10
Accession	P34130
GeneID	4909
Source	E.coli-derived Human NT-4, G81-A210, with an N-terminal Met.
Molecular Weight	Approximately 28.1 kDa.
AA Sequence	MGVSETAPAS RRGELAVCDA VSGWVTDTRRT AVDLRGREVE VLGEVPAAGG SPLRQYFFET RCKADNAEEG GPGAGGGGCR GVDRRHWVSE CKAKQSYVRA LTADAQGRVG WRWIRIDTAC VCTLLSRTGR A
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by the dose-dependent induction of choline acetyl transferase activity in rat basal forebrain primary septal cell cultures is less than 50 ng/mL, corresponding to a specific activity of > 2.0 × 10 ⁴ IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 5.5.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C for 1 year.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 °C under sterile conditions after reconstitution.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.