

**ChemWhat Technical Data Sheet (TDS)**

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<b>Catalog Number:</b>	107-04
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 28.1 kDa, a noncovalently linked homodimer of two 14.0 kDa polypeptide monomers (262 total amino acid residues).
<b>Quantity:</b>	2µg/10µg/1000µg
<b>AA Sequence:</b>	MGVSETAPAS RRGELAVCDA VSGWVTD RRT AVDLRGREVE VLGEVPAAGG SPLRQYFFET RCKADNAEEG GPGAGGGGCR GVDRRHVWSE CKAKQSYVRA LTADAQGRVG WRWIRIDTAC VCTLLSRTGR A
<b>Purity:</b>	> 97 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> 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 <sup>4</sup> IU/mg.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 5.5.
<b>Endotoxin:</b>	Less than 1 EU/µg of rHuNT-4 as determined by LAL method.
<b>Reconstitution:</b>	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.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	<b>ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.</b>

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***Human Neurotrophin-4***

NT-4 also named as NT-5 is a neuronal and epithelial grow factor belongs to the NGF-beta family. The NT-4 precursor is consisted of a 24 a.a. signal peptide, a 56 a.a. propertied and 130 a.a. NT-4. The mature protein has six Cys amino acid residues and has the relative structure with NT-3, BDNF (sharing about 48 % - 52 % sequence identity). Additionally, it shares 91 % and 95 % a.a. sequence identity with mouse and rat NT-4. NT-4 is mainly expressed in prostate and has low level thymus, placenta, and skeletal muscle. It can binding with the LNGFR and trkB receptors and plays a crucial role in the regulation of survival and the maintenance of peripheral sensory sympathetic neurons. Defect of NT-4 may cause primary open angle glaucoma type 10.