

**ChemWhat** Recombinant Human Novel Neurtrophin-1/B-Cell  
A brand under Watson **Stimulating Factor-3**  
**(rHuNNT-1/BCSF-3)**

**ChemWhat Technical Data Sheet (TDS)**

<b>Catalog Number:</b>	107-01
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 22.3 kDa, a single non-glycosylated polypeptide chain containing 198 amino acids.
<b>Quantity:</b>	2µg/10µg/1000µg
<b>AA Sequence:</b>	LNRTGDPGPG PSIQKTYDLT RYLEHQLRSL AGTYLNYLGP PFNEPDFNPP RLGAETLPRA TVDLEVWRSL NDKLRLTQNY EAYSHLLCYL RGLNRQAATA ELRRSLAHFC TSLQGLLGS AGVMAALGYP LPQPLPGTEP TWTPGPAHSD FLQKMDDFWL LKELQTLWR SAKDFNRLKK KMQPPAAAVT LHLGAHGF
<b>Purity:</b>	> 98 % 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 a cell proliferation assay using human TF-1 cells is less than 4 ng/ml, corresponding to a specific activity of > 2.5 × 10 <sup>5</sup> IU/mg in the presence of human CNTF R alpha.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in 30 % Acetonitrile and 0.1 % TFA.
<b>Endotoxin:</b>	Less than 0.1 EU/µg of rHuNNT-1/BCSF-3 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>	Use a <b>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>

***Human Novel Neurtrophin-1/B-Cell Stimulating Factor-3***

Novel Neurotrophin-1 (NNT-1) or B-Cell Stimulating Factor-3 (BSF-3), is a new member of the IL-6 family of structurally related cytokines that includes IL-6, CNTF, LIF, CT-1, IL-11 and OSM. All family members share the receptor subunit gp130 that belong to the type I cytokine receptor superfamily. Ligand binding leads to gp130 homodimerization or heterodimerization (with LIF receptor or OSM receptor beta), and induces cell signaling and functional activity. For several family members, including CNTF, IL-6, and IL-11, binding of the ligand to a specific receptor alpha subunit (CNTF R alpha, IL-6 R alpha, or IL-11 R alpha) is required prior to gp130 homo- or hetero-dimerization.