

## Product Datasheet

### RecombinantCNTF,Human (orb1494901)

<b>Description</b>	<p>Ciliary Neurotrophic Factor (CNTF) is a cytokine belonging to the Interleukin 6 (IL-6) family, which also includes IL-6, Oncostatin M, Leukemia Inhibitory Factor (LIF), and Cardiotrophin-1. Structurally, CNTF resembles a four-helix bundle composition, similar to the other members of the IL-6 family. The receptor for CNTF is composed of three parts: a gp130-like subunit common in the IL-6 receptor family, a LIF Receptor <math>\beta</math> subunit, and a CNTF specific <math>\alpha</math> receptor subunit. Upon binding to the CNTF, the <math>\beta</math> subunit of the CNTF receptor will undergo tyrosine phosphorylation, and activate the intracellular JAK/STAT pathway. The main function of CNTF in vivo is to promote the differentiation and survival of a variety of neurons and glial cells, including sympathetic precursor cells and spinal motor neurons. Recombinant human Ciliary Neurotrophic Factor (rhCNTF) produced in E. coli is a single non-glycosylated polypeptide chain containing 199 amino acids. A fully biologically active molecule, rhCNTF has a molecular mass of 22.8 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.</p>
<b>Endotoxins</b>	< 0.2 EU/ $\mu$ g, determined by LAL method.
<b>Preservatives</b>	Lyophilized after extensive dialysis against PBS.
<b>Form/Appearance</b>	Lyophilized after extensive dialysis against PBS.
<b>Storage</b>	Lyophilized recombinant human Ciliary Neurotrophic Factor (rhCNTF) remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, rhCNTF remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.
<b>Note</b>	For research use only
<b>Application notes</b>	Reconstituted in ddH <sub>2</sub> O or PBS at 100 $\mu$ g/ml.
<b>Protein Sequence</b>	AFT EHSPLTPHRR DLCSRSIWLA RKIRSDLTAL TESYVKHQGL NKNINLDSAD GMPVASTDQW SELTEAERLQ ENLQAYRTFH VLLARLLEDQ QVHFTPTEGD FHQAIHTLLL QVAAFAYQIE ELMILLEYKI PRNEADGMPI NVGDGGLFEK KIWGLKVLQE LSQWTVRSIH DLRFISSHQT GIPARGSHYI ANNKKM
<b>Purity</b>	> 95% as analyzed by SDS-PAGE and HPLC.

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<b>Source</b>	Escherichia coli.
<b>MW</b>	22.8 kDa, observed by reducing SDS-PAGE.
<b>Expiration Date</b>	6 months from date of receipt.

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