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# DATASHEET

Recombinant human CNTF protein

#### **Product overview**

Name Cat No Biological description	Recombinant human CNTF protein HB8968 The CNTF neural factor appears to act only on the nervous system and is thought to promote neurotransmitter synthesis and neurite outgrowth in some neuronal populations.
	It is potent survival factor for neurons and oligodendrocytes.
Species of origin Alternative names Biological action Purity Description	CNTF is often used when differentiating hPSC-derived neural progenitor cells into astrocytes. human Recombinant Human Ciliary Neurotrophic Factor, HCNTF, CNTF, Ciliary Neurotrophic Factor. Activator >98% Potent neural factor

## **Biological Data**

Application notes ED<sub>50</sub> = <2 ng/ml (determined by dose-dependent stimulation of TF-1 cells), corresponding to a specific activity of 500,000IU/mg.

### **Solubility & Handling**

Storage instructions Solubility overview	-20 °C and avoid freeze thaw cycles To make a stock solution, reconstitute in sterile 18MΩcm water at a concentration > 100µg/ml, which can then be diluted to make a working solution
Handling	<ul> <li>Solutions should be made in sterile deionized water (not less than 100 μg/ml). This solution can then be further diluted with other aqueous solutions.</li> <li>Following reconstitution, solutions may be stored at 4°C and are useable for around 2-7 days and for future use store at -18°C.</li> <li>Freeze-thaw cycles should be prevented.</li> </ul>
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

### **Chemical Data**

UniProt ID	P26441
Molecular Weight	22.7
Source	E. Coli.
Appearance	White lyophilized powder (sterile filtered & freeze-dried)
Formulation	Lyophilized from a concentrated (1mg/ml) solution in water containing 5mM sodium Phosphate buffer
	(pH 7.5) and 5mM sodium chloride

#### References

The ciliary neurotrophic factor and its receptor, CNTFR alpha

 Sleeman MW et al (2000) Pharm Acta Helv 74(2-3)

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 10812968

Ciliary neurotrophic factor (CNTF) promotes skeletal muscle progenitor cell (MPC) viability via the phosphatidylinositol 3-kinase-Akt pathway

Hiatt K *et al* (2014) J Tissue Eng Regen Med 8(12) **PubMedID** 23147834

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Pasquin S et al (2015) Cytokine Growth Factor Rev 26(5)**PubMedID**26187860