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DATASHEET

Recombinant human CNTF protein

Product overview

Name	Recombinant human CNTF protein
Cat No	HB8968
Biological description	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. CNTF is often used when differentiating hPSC-derived neural progenitor cells into astrocytes.
Species of origin	human
Alternative names	Recombinant Human Ciliary Neurotrophic Factor, HCNTF, CNTF, Ciliary Neurotrophic Factor.
Biological action	Activator
Purity	>98%
Description	Potent neural factor

Biological Data

Application notes	ED_{50} = <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	-20°C and avoid freeze thaw cycles
Solubility overview	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	• 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. • 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. • Freeze-thaw cycles should be prevented.
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

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

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