

CNTF active protein

CNTF Protein, Human, Recombinant (His Tag)

CATALOG #
AAA257994

HOST
E Coli

PRODUCT SYNONYMS

CNTF; CNTF Protein; Human; Recombinant (His Tag); Human CNTF Protein (His Tag); HCNTF Protein; ciliary neurotrophic factor; CNTF active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	>90% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Ala2-Met20 0
Species	Human
Predicted N Terminal	Met
Tag	N-His
Protein Construction	A DNA sequence encoding the human CNTF (NP_000605.1)(Ala 2-Met 200) was expressed, with a polyhistide tag at the N-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	1. Measured by its binding ability in a functional ELISA. Immobilized human His-CNTF at 10ug/ml (100uL/well) can bind biotinylated rat CNTFR-His. The EC50 of biotinylated rat CNTFR-His is 60-140ng/mL. 2. Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is typically 1-4ug/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data
Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is typically 1-4 ug/mL.

ADDITIONAL INFORMATION

Related Product Information for CNTF active protein	Background: Ciliary neurotrophic factor (CNTF) is a member of the cytokine family. It is a polypeptide hormone that has functions in promoting neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. Its actions appear to be restricted to the nervous system. Ciliary neurotrophic factor (CNTF) has biological effects through the activation of a multi-subunit receptor complex, consisting of an extracellular CNTF binding subunit (CNTFalpha) and two transmembrane signal transduction proteins: glycoprotein gp130 and LIF receptor. CNTF is considered as a potent survival factor of neurons and oligodendrocyteands may be relevant in reducing tissue destruction during inflammatory attacks. CNTF also is a survival factor for neurons of the peripheral sensory sympathetic and ciliary ganglia. It has been reported that CNTF could be an agent that has therapeutic potential and possibly induces differentiation of large multipolar ganglionic phenotype in a subset of progenitors.
References	Dutt K, et al. (2010) Ciliary neurotrophic factor: a survival and differentiation inducer in human retinal progenitors. In Vitro Cell Dev Biol Anim. 46 (7) : 635-46.Lam A, et al.(1991) Sequence and structural organization of the human gene encoding ciliary neurotrophic factor. Gene 102 (2) : 271-6.Bazan JF. (1991) Neuropoietic cytokines in the hematopoietic fold. Neuron 7 (2) : 197-208.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4758020
NCBI GeneID	1270
NCBI Accession #	NP_000605.1
NCBI GenBank Nucleotide #	NM_000614.3
UniProt Accession #	P26441; B2RAB2
Molecular Weight	22,931 Da
NCBI Official Full Name	ciliary neurotrophic factor
NCBI Official Synonym Full Names	ciliary neurotrophic factor
NCBI Official Symbol	CNTF
NCBI Official Synonym Symbols	HCNTF
NCBI Protein Information	ciliary neurotrophic factor
UniProt Protein Name	Ciliary neurotrophic factor
UniProt Gene Name	CNTF
UniProt Synonym Gene Names	CNTF

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/cntf/257994>