Datasheet for ABIN7491826

CNTF Protein

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Overview

Quantity:	50 µg
Target:	CNTF
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	Western Blotting (WB)

Product Details

Purpose:	Rat Ciliary Neurotrophic Factor, Recombinant, E. coli
Sequence:	AFAEQTPLTL HRRDLCSRSI WLARKIRSDL TALMESYVKH QGLNKNINLD SVDGVPVAST DRWSEMTEAE RLQENLQAYR TFQGMLTKLL EDQRVHFTPT EGDFHQAIHT LMLQVSAFAY QLEELMVLLE QKIPENEADG MPATVGDGGL FEKKLWGLKV LQELSQWTVR SIHDLRVISS HQMGISALES HYGAKDKQM
Specificity:	Toxin target: leukemia inhibitory factor receptor, gp130, CNTFR
Characteristics:	Rat Ciliary Neurotrophic Factor, Recombinant, E. coli
Purity:	≥98 % (HPLC)
Sterility:	0.2 µm filtered

Target Details

Target:	CNTF
Alternative Name:	CNTF (CNTF Products)

Target Details

Background:	Ciliary Neurotrophic Factor,CNTF is a polypeptide trophic factor, a member of the alpha-helical cytokine superfamily1. It was initially purified from the chick eye on the basis of its ability to promote survival of E8 chick ciliary ganglion neurons in culture2. CNTF is synthesized by glia both in the CNS and PNS3 and it has been shown to be ubiquitously distributed in neurons and glia throughout the rodent brain4. CNTF effects are mediated by a tripartite receptor complex consisting of two signal-transducing subunits (leukemia inhibitory factor receptor, gp130) and a CNTF-specific ligand-binding-subunit (CNTFR)5.CNTF can support the survival of many different cell populations within the PNS and CNS6. In vitro, CNTF promotes proliferation and neuronal specifications in hippocampal neurons. In vivo, it supports the viability of non-primate motor neurons7, induces sprouting of cholinergic motor neurons8 and delays neural degeneration in genetic models of motor neuron disease9. In addition, it is involved in the development stage of astrocytes and oligodendocytes10.
Molecular Weight:	22.7 kDa
UniProt:	P20294
Pathways:	JAK-STAT Signaling

Application Details

Application Notes:	Antigen Preadsorption Control: EC50 = ~2.2 pM
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Centrifuge the vial (10,000 x g for 5 minutes) before adding solvent to spin down all the powder to the bottom of the vial. The lyophilized product may be difficult to visualize. Add solvent directly to the centrifuged vial. Gently tap, tilt, and roll the vial to aid dissolution. Avoid vigorous vortexing, light vortexing for up to 3 seconds is acceptable if needed. For long-term storage in solution, we recommend preparing a stock solution by dissolving the product in sterile water at a concentration of at least 0.1 mg/mL. Divide the stock solution into small aliquots and store at -20 °C. Before use, thaw the relevant vial(s) and dilute to the desired working concentration in your working buffer. It is recommended to prepare fresh solutions in working buffers just before use. For long-term storage of diluted solutions, we recommend adding 0.1 % BSA. Repeated freeze-thaw cycles may result in loss of activity.
Buffer:	Lyophilized from double distilled water (ddH2O).

Handling

Storage:	-20 °C
Storage Comment:	The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods (up to 6 months), small aliquots should be stored at -20°C. We do not recommend storing the product in working solutions for longer than a few days. Avoid multiple freeze-thaw cycles.,The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods (up to 6 months), small aliquots should be stored at -20°C. We do not recommend storing the product in working solutions for longer than a few days. Avoid multiple freeze-thaw cycles.