

Anti-CNTF Picoband Antibody

Catalog # ABO11756

Product Information

Application	WB, IHC-P
Primary Accession	P51642
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Ciliary neurotrophic factor(CNTF) detection. Tested with WB, IHC-P in Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	12803
Other Names	Ciliary neurotrophic factor, CNTF, Cntf
Calculated MW	22587
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Mouse
Subcellular Localization	Cytoplasm.
Tissue Specificity	Nervous system.
Source	Eukaryota
Protein Name	Ciliary neurotrophic factor
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E.coli-derived mouse CNTF recombinant protein (Position: A2-M198). Mouse CNTF shares 83% and 95% amino acid (aa) sequences identity with human and rat CNTF, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated

freezing and thawing.

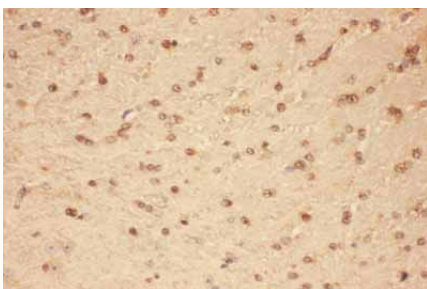
Protein Information

Name	Cntf {ECO:0000312 MGI:MGI:88439}
Function	Functions as a cytokine through the ciliary neurotrophic factor receptor (CNTFR) complex. The CNTFR complex indeed consists of the membrane-anchored non-signaling receptor CNTFR and the two signaling receptor subunits IL6ST/gp130 and LIFR that transduce the signal into the cell. Functionally, promotes neuronal survival, supports differentiation of various neuronal and non-neuronal cells, and importantly regulates oligodendrocyte progenitor proliferation. Mechanistically, ligand binding to the CNTFR induces dimerization of the IL6ST/gp130 and LIFR, which activates JAK tyrosine kinases (JAK1 or JAK2 and to lesser extent TYK2) bound to their intracellular domains. These kinases subsequently phosphorylate IL6ST/gp130 and LIFR. The tyrosine phosphorylated signaling receptors serve in turn as docking sites for recruitment and activation of signal transducer and activators of transcription (STAT3 and to lesser extent STAT1). Can also signal via trans-signaling using soluble forms of CNTFR (By similarity). Seems to prevent the degeneration of motor axons after axotomy (By similarity).
Cellular Location	Cytoplasm {ECO:0000250 UniProtKB:P26441}. Secreted {ECO:0000250 UniProtKB:Q02011}. Note=The precursor seems to be cytoplasmic (By similarity). The lack of a specific hydrophobic segment in the precursor sequence suggests that CNTF is released by damaged cells or is secreted by a mechanism differing from that used for other secretory proteins (By similarity). {ECO:0000250 UniProtKB:P20294, ECO:0000250 UniProtKB:P26441}

Background

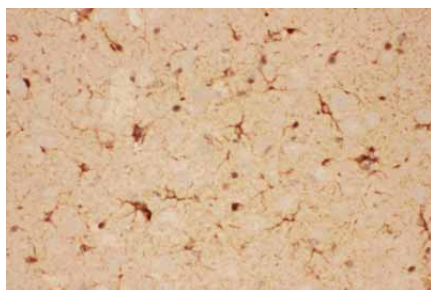
Ciliary neurotrophic factor (CNTF) is a potent polypeptide hormone whose actions appear to be restricted to the nervous system where it promotes survival, neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. The mouse CNTF gene is on mouse chromosome 19 and that its expression is unaffected in the mouse neurologic mutant wobbler, a form of spinal muscular atrophy. The CNTF protein is highly conserved in evolution. The protein is a potent survival factor for neurons and oligodendrocytes, and it may be involved in reducing tissue destruction during inflammatory attacks. CNTF is thought to act centrally by inducing hypothalamic neurogenesis to modulate food intake and peripherally by altering hepatic gene expression, in a manner similar to that of leptin.

Images



Anti-CNTF Picoband antibody, ABO11756-1.JPGIHC(P):
Mouse Brain Tissue

Anti-CNTF Picoband antibody, ABO11756-2.JPGIHC(P): Rat
Brain Tissue



Anti-CNTF Picoband antibody, ABO11756-3.jpgAll lanes:
Anti-CNTF(ABO11756) at 0.5ug/mlWB: Recombinant
Mouse CNTF Protein 0.5ngPredicted bind size:
36KDObserved bind size: 36KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.