

Anti-CNTF Picoband Antibody

Catalog # ABO11783

Product Information

Application	WB, IHC-P, E
Primary Accession	P20294
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, ELISA in Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	25707
Other Names	Ciliary neurotrophic factor, CNTF, Cntf
Calculated MW	22854
Application Details	ELISA , 0.1-0.5 μ g/ml, Rat, - Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Rat
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 rat CNTF recombinant protein (Position: A2-M200). Rat CNTF shares 84% and 95% amino acid (aa) sequences identity with human and mouse 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.

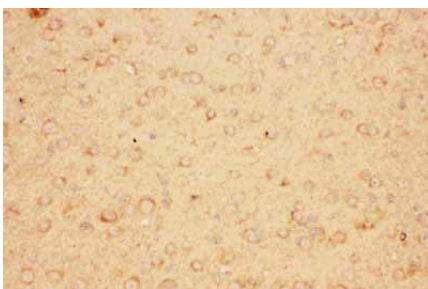
Protein Information

Name	Cntf {ECO:0000312 RGD:2370}
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 (By similarity). Functionally, promotes neuronal survival, supports differentiation of various neuronal and non-neuronal cells, and importantly regulates oligodendrocyte progenitor proliferation (Probable). 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 (PubMed: 2342575).
Cellular Location	Cytoplasm. Secreted {ECO:0000250 UniProtKB:Q02011}. Note=The precursor is cytoplasmic (Probable). 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 (Probable).

Background

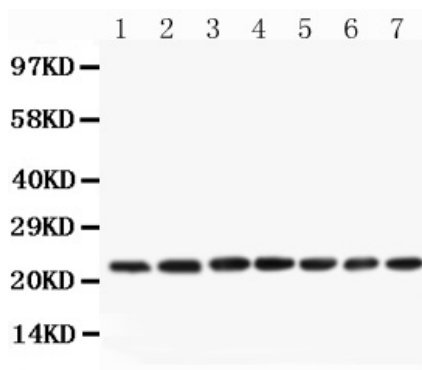
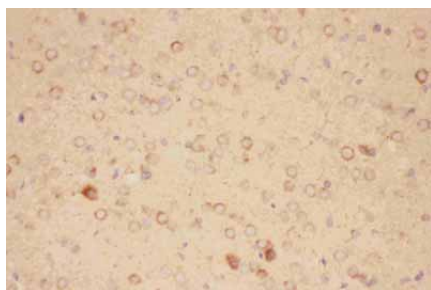
Ciliary neurotrophic factor is a protein that in humans is encoded by the CNTF gene. The protein encoded by this gene is a polypeptide hormone and nerve growth factor whose actions have mainly been studied in the nervous system where it promotes neurotransmitter synthesis and neurite outgrowth in certain neural populations including astrocytes. It is mapped to 11q12.1. In addition to neurotrophic effects on parasympathetic neurons, CNTF was shown to have activities on sympathetic and sensory neurons. CNTF appears not to be involved in motor neuron survival during development. human CNTF has a trophic influence on degenerating striatal neurons as well as on critical nonstriatal regions. CNTF plays a role in a cardiac signal transduction pathway that regulates obesity-related left ventricular hypertrophy.

Images



Anti-CNTF Picoband antibody, ABO11783-1.JPGIHC(P):
Mouse Brain Tissue

Anti-CNTF Picoband antibody, ABO11783-2.JPGIHC(P): Rat
Brain Tissue



Anti-CNTF Picoband antibody, ABO11783-3.jpg
 All lanes:
 Anti-CNTF(ABO11783) at 0.5ug/ml
 Lane 1: PC-12 Whole Cell Lysate at 40ug
 Lane 2: NRK Whole Cell Lysate at 40ug
 Lane 3: RH35 Whole Cell Lysate at 40ug
 Lane 4: Rat Brain Tissue Lysate at 40ug
 Lane 5: Rat Liver Tissue Lysate at 40ug
 Lane 6: Rat Spleen Tissue Lysate at 40ug
 Lane 7: Rat Testis Tissue Lysate at 40ug
 Predicted bind size: 23KD
 Observed bind size: 23KD

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