

Polyclonal Anti-CNTF Picoband™ Antibody

Catalog Number: PB9032

Description

Gene Name	ciliary neurotrophic factor
Recommended Protein Name	Ciliary neurotrophic factor
Lot No.	0901412Da913277
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: mouse, rat
Immunogen	E.coli-derived mouse CNTF recombinant protein (Position: A2-M198). Mouse CNTF shares 83% and 95% amino acid (aa) sequence identity with human and rat CNTF, respectively.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Ms	-
Immunohistochemistry (Paraffin-embedded Section)	0.5-1 µg/ml	Ms, Rat	By Heat

WB: The detection limit for CNTF is approximately 0.25ng/lane under reducing conditions.

Tested Species: In-house tested species with positive results.

By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, 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.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IHC(P).

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.

Reference

1. Lam, A., Fuller, F., Miller, J., Kloss, J., Manthorpe, M., Varon, S., Cordell, B. Sequence and structural organization of the human gene encoding ciliary neurotrophic factor. *Gene* 102: 271-276, 1991.
2. Watt, M. J., Dzamko, N., Thomas, W. G., Rose-John, S., Ernst, M., Carling, D., Kemp, B. E., Febbraio, M. A., Steinberg, G. R. CNTF reverses obesity-induced insulin resistance by activating skeletal muscle AMPK. *Nature Med.* 12: 541-548, 2006.