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Polyclonal Antibody to Ciliary Neurotrophic Factor (CNTF)

Ciliary Neurotrophic Factor
Catalog # AP74524

Product Information

Application	WB
Primary Accession	O02732
Reactivity	Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22718

Additional Information

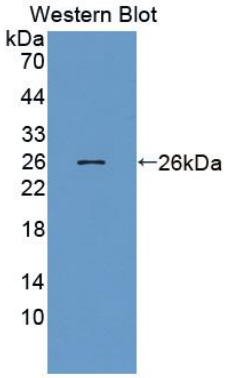
Other Names	HCNTF
Target/Specificity	Sus scrofa; Porcine (Pig)
Dilution	WB~~Western blotting: 0.2-2 □g/mL;1:250-2500 Immunohistochemistry: 5-20 □g/mL;1:25-100 Immunocytochemistry: 5-20 □g/mL;1:25-100 Optimal working dilutions must be determined by end user.
Format	PBS, pH7.4, containing 0.02% NaN3, 50% glycerol.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	CNTF {ECO:0000250|UniProtKB:P26441}
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 semms 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}

Images



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