10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CNTFR antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14485

Product Information

Application	WB
Primary Accession	P26992
Other Accession	NM_001842, NP_001833
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine, Sheep
Predicted	Human, Mouse, Rat, Rabbit, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40633

Additional Information

Gene ID	1271
Alias Symbol	MGC1774
Other Names	Ciliary neurotrophic factor receptor subunit alpha, CNTF receptor subunit alpha, CNTFR-alpha, CNTFR
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-CNTFR antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	CNTFR antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CNTFR {ECO:0000303|PubMed:7774913, ECO:0000312|EMBL:AAA35707.1}
Function	Functions either as a membrane-anchored non-signaling receptor via a GPI anchor or, after proteolytic release, as a soluble ligand-binding chaperone, and mediates signaling of CNTF-related cytokines, including ciliary neurotrophic factor (CNTF), cardiotrophin- like cytokine factor 1 (CLCF1), and the heterodimeric cytokine formed by CLCF1 and the cytokine receptor-like factor 1 (CRLF1) (PubMed:10966616, PubMed:11285233, PubMed:11294841, PubMed:26858303, PubMed:31932351, PubMed:36930708, PubMed:7681218). Involved namely in cell survival of motor neurons and regulation of oligodendrocyte progenitor proliferation (PubMed:11285233, PubMed:19386761, PubMed:31932351). Functions within the ciliary

neurotrophic factor receptor (CNTFR) complex as a membrane-anchored non-signaling receptor subunit associated with two other signaling receptor subunits IL6ST/gp130 and LIFR (PubMed:10966616, PubMed:11285233, PubMed:11294841, PubMed:26858303, PubMed:31932351, PubMed:36930708, PubMed:7681218). Also, functions within the humanin receptor complex as a membrane-anchored non-signaling receptor subunit associated with IL6ST/GP130 and IL27RA/WSX1 that mediates the MT-RNR2/humanin signaling which induces neuroprotection (PubMed:19386761). Alternatively functions as a soluble ligand-binding chaperone that binds ligand in the extracellular space, forming a cytokine complex which is delivered to the IL6ST/gp130 and LIFR signaling receptor subunits (PubMed:11285233, PubMed:31932351, PubMed:7681218). Mechanistically, ligand binding to the CNTFR induces dimerization of the IL6ST/gp130 and LIFR (or IL27RA/WSX1 in the case of MT-RNR2/humanin), which activate JAK tyrosine kinases (JAK1 or JAK2 and to lesser extent TYK2) bound to their intracellular domains (PubMed:10966616, PubMed:11285233, PubMed:11294841, PubMed:19386761, PubMed:7681218). These kinases subsequently phosphorylate IL6ST/gp130 and LIFR (or IL27RA/WSX1) (PubMed:10966616, PubMed:11285233, PubMed:11294841, PubMed:7681218). 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) (PubMed:10966616, PubMed:11285233, PubMed:11294841, PubMed:19386761, PubMed:7681218).

Cellular Location

Cell membrane; Lipid-anchor, GPI-anchor. Secreted. Note=Localized at cell membrane when associated with SORL1 (PubMed:26858303). Released from plasma membrane and extracellular vesicles (EV) by GDPD2 (PubMed:31932351)

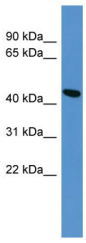
Tissue Location

Nervous system and skeletal muscle (PubMed:1648265). Soluble form is detected in cerebrospinal fluid (CSF) and is released from skeletal muscle in response to peripheral nerve injury (PubMed:7681218).

References

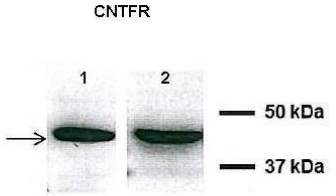
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Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
Humphray S.J.,et al.Nature 429:369-374(2004).
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Images



WB Suggested Anti-CNTFR Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: HepG2 cell lysate

A549 , H441



See Immunoblot 2 Data and customer Feedback for more Information

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