Rat CNTFR alpha Alexa Fluor® 532-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF-559-NAX
100 µg

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects human CNTF Rα in direct ELISAs and Western blots. In direct ELISAs, greater than 50% cross-reactivity with recombinant human CNTF sRα is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant rat CNTF Rα Ala19-Pro346 Accession # Q08406
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

The high-affinity CNTF receptor complex, which mediates the biological action of CNTF, contains three proteins: the ligand-binding a subunit (CNTF Rα) and the two signal-transducing proteins LIF Rβ and gp130. Whereas LIF Rβ and gp130 are widely expressed in many cell types, the expression of CNTF Rα is restricted to the central and peripheral nervous systems. cDNAs encoding CNTF Rα have been isolated from both human and rat and were shown to share 94% amino acid (aa) sequence identity. Rat CNTF Rα cDNA encodes a 372 amino acid residue precursor protein that apparently has a 22 aa residue signal peptide and five potential glycoslyation sites. CNTF Rα differs from other cytokine receptors in that it lacks transmembrane and cytoplasmic domains and is anchored to cell membranes by a glycosylphosphatidylinositol (GPI) linkage. Similar to other GPI-linked proteins, soluble CNTF receptor α (CNTF sRα) can be released from the cell surface by phosphatidylinositol-specific phospholipase C. CNTF sRα can be released from skeletal muscle in response to peripheral nerve injury and high concentrations of CNTF sRα have also been detected in human cerebrospinal fluid. CNTF sRα binds CNTF in solution and the complex can act on cells that express only LIF Rβ and gp130 but not CNTF Rα.

PRODUCT SPECIFIC NOTICES

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