

Recombinant Protein Technical Manual

Recombinant Rat CNTFR/CNTFR-alpha Protein (His Tag)(Active)

RPES1461

Product Data:

Product SKU: RPES1461 **Size:** 50μg

Species: Rat Expression host: Baculovirus-Insect Cells

Uniprot: Q08406

Protein Information:

Molecular Mass: 39.6 kDa

AP Molecular Mass: 48 kDa

Tag: C-His

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized Rat CTNFR at 10

μg/ml (100 μl/well) can bind biotinylated human CNTF with a linear ranger of

1.2860 ng/ml.

Purity: > 97 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g of the protein as determined by the LAL method}$

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% gly, pH 8.0

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: Cntfr

Immunogen Information:

Sequence: Met 1-Pro 346

Background:

Ciliary neurotrophic factor(CNTF) is a member of the cytokine family. It is a polypeptide hormone that have functions in promoting neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. It's actions appear to be restricted to the nervous system. Ciliary neurotrophic factor(CNTF) has biological effects through the activation of a multi-subunit receptor complex, consisting of an extracelluar CNTF binding subunit(CNTF α) and two transmembrane signal transduction proteins: glycoprotein gp130 and LIF receptor. CNTF is considered as a potent survival factor of neurons and oligodendrocytes and may be relevant in reducing tissue destruction during inflammatory attacks. CNTF is also a survival factor for neurons of the peripheral sensory sympathetic, and ciliary ganglia. It has been reported that CNTF could be an agent that has therapeutic potential and possibly induces differentiation of large multipolar ganglionic phenotype in a subset of progenitors.