



# Recombinant Protein Technical Manual

## Recombinant Human CNTFR/CNTFR-alpha Protein (His Tag)(Active) RPES4369

### Product Data:

**Product SKU:** RPES4369

**Size:** 50µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** NP\_001833.1

### Protein Information:

**Molecular Mass:** 36 kDa

**AP Molecular Mass:** 45-48 kDa

#### Tag:

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized human CNTFR at 10 µg/ml (100 µl/well) can bind biotinylated human CNTF with a linear ranager of 1.2860 ng/ml.

**Purity:** > 98 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg 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 50mM Tris, 100mM NaCl, pH 8.0

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

**Application:** Functional ELISA

**Synonyms:** CNTFR;MGC1774

## 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 extracellular CNTF binding subunit(CNTF $\alpha$ ) 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.