Recombinant Protein Technical Manual

Recombinant Human Neurturin/NRTN Protein

RPES0395

Product Data:

Product SKU: RPES0395

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: Q99748

Protein Information:

Molecular Mass: 11.8 kDa

AP Molecular Mass: 15 kDa

Tag:

Bio-activity:

Purity: > 95 % 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

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

Formulation: Lyophilized from a 0.2 µm filtered solution of 10mM sodium citrate, pH4.0.

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

Application:

Synonyms: Neurturin; NRTN

Immunogen Information:

Sequence: Ala96-Val197

Background:

Neurturin is a member of the GDNF family of ligands, which include glial cell-derived neurotrophic factor (GDNF), Neurturin, Persephin, and Artemin. Neurturin is expressed in both neuronal and nonneuronal tissues. Similarly to other TGFβ family proteins, Neurturin is synthesized as a precursor protein that is cleaved at the dibasic cleavage site (RXXR) to release the carboxyterminal domain. The carboxy terminal domain of Neurturin contains the characteristic seven conserved cysteine residues necessary for the formation of the cysteine-knot and the single interchain disulfide bond. Biologically active human Neurturin is a disulfide-linked homodimer of the carboxy-terminal 102 amino acid residues. Unlike other members of TGF-β family, bioactivities of all GDNF family ligands are mediated through a unique multicomponent receptor complex composed of high affinity ligand binding component (GFRα-GFRα-4) and a common signaling component (cRET receptor tyrosine kinase). Each member of the GDNF family ligands has its preferred binding protein. Neurturin preferentially binds to GFRα-2 but can also bind GFRα at higher concentrations. It may play a role in regulating the development and maintenance of the central and peripheral nervous systems and as well as non neuronal systems.