



Recombinant Protein Technical Manual

Recombinant Human TrkC/NTRK3 Protein (His Tag)(Active)
RPES2659

Product Data:

Product SKU: RPES2659

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001007157.1

Protein Information:

Molecular Mass: 46.1 kDa

AP Molecular Mass: 80-90 kDa

Tag: C-His

Bio-activity: Immobilized human Trkc-His at 10 µg/ml (100 µl/well) can bind biotinylated human NT3 , The EC50 of biotinylated human NT3 is 0.03-0.07 µg/ml.

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°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 PBS, pH 7.4

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

Application: Functional ELISA

Synonyms: gp145(trkC);TRKC

Immunogen Information:

Sequence: Met 1-Asp 428

Background:

NT-3 growth factor receptor also known as neurotrophic tyrosine kinase receptor type 3 or TrkC tyrosine kinase or Trk-C receptor, is a member of the neurotrophic tyrosine receptor kinase (NTRK) family. This kinase is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and members of the MAPK pathway. TrkC/NTRK3 is widely expressed in the developing and adult nervous system. In later embryonic development, TrkC/NTRK3 is expressed in various structures of the CNS including the caudatoputamen, septal nuclei, cerebellum, and brainstem. Other neurotrophins include nerve growth factor(NGF), neurotrophin-3 and neurotrophin-4. In the PNS, trkC hybridization appears to correlate, both temporally and spatially, with the outgrowth of axons toward their peripheral targets. TrkC/NTRK3 is widely expressed in the three identified branches of the mammalian nervous system and appears to correlate with the expression of NT-3, its cognate ligand. The apparent colocalization of trkC transcripts with NT-3 raises the possibility this neurotrophin exerts its trophic effects by a paracrine and/or autocrine mechanism. Signalling through this kinase leads to cell differentiation and may play a role in the development of proprioceptive neurons that sense body position. Mutations in TrkC encoding gene have been associated with medulloblastomas, secretory breast carcinomas and other cancers.