



Recombinant Protein Technical Manual

Recombinant Mouse TrkB/NTRK2 Protein (His Tag)(Active)
RPES3677

Product Data:

Product SKU: RPES3677

Size: 20µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: P15209-2

Protein Information:

Molecular Mass: 46 kDa

AP Molecular Mass: 75-85 kDa

Tag: C-His

Bio-activity: 1. Measured by its binding ability in a functional ELISA. 2. Immobilized recombinant Mouse/Human BDNF Protein (Native) at 10 µg/ml (100 µl/well) can bind biotinylated mouse TrkB-His with a linear range of 10-80 ng/ml.

Purity: > 98 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg 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 PBS, pH 7.4

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

Application: Functional ELISA

Synonyms: GP145-TrkB/GP95-TrkB;Tkrb;trk-B;trkB

Immunogen Information:

Sequence: Met 1-His 429

Background:

TrkB receptor also known as TrkB tyrosine kinase or BDNF/NT-3 growth factors receptor or neurotrophic tyrosine kinase, receptor, type 2 (NTRK2) is a single transmembrane catalytic receptors with intracellular tyrosine kinase activity. TrkB/NTRK2 is a member of the neurotrophic tyrosine receptor kinase (NTRK) family. TrkB tyrosine kinase (TrkB) or NTRK2 is coupled to the Ras, Cdc42/Rac/RhoG, MAPK, PI3-K and PLCgamma signaling pathways. There are four members of the Trk family; TrkA, TrkB and TrkC and a related p75NTR receptor. Each family member binds different neurotrophins with varying affinities. TrkB/NTRK has highest affinity for brain-derived neurotrophic factor (BDNF) and is involved in neuronal plasticity, longterm potentiation and apoptosis of CNS neurons. Other neurotrophins include nerve growth factor(NGF), neurotrophin-3 and neurotrophin-4. TrkB/NTRK is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and members of the MAPK pathway. Signalling through this kinase leads to cell differentiation. Mutations in TrkB/NTRK have been associated with obesity and mood disorders.