

TrkB Protein, Human, Recombinant (His), Biotinylated

General Information

Synonyms:	EIEE58;DEE58;TRKB;trk-B;GP145-TrkB;OBHD
Protein Construction:	A DNA sequence encoding the extracellular domain (Met1-His430) of human TrkB / NTRK2 (NP_001007098.1) precursor was expressed with a C-terminal polyhistidine tag. The purified protein was biotinylated in vitro.
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q16620-2
Molecular Weight:	45.66 kDa (predicted); 65.4 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Immobilized Recombinant Human/Mouse/Rat/Cynomolgus/Canine BDNF Protein at 2 µg/mL (100 µL/well) can bind TrkB Protein, Human, Recombinant (His), Biotinylated (Cat#TMPY-06997), the EC50 is 10-30 ng/mL.
Purity:	≥ 95% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from sterile PBS, pH 7.4. Please contact us for any concerns or special requirements. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hardcopy of datasheet or the lot-specific COA.

Preparation and Storage

Reconstitution:
Please refer to the lot-specific COA.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein 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 receptor 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 the highest affinity for brain-derived neurotrophic factor (BDNF) and is involved in neuronal plasticity, long-term 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. Signaling through this kinase leads to cell differentiation. Mutations in TrkB/NTRK have been associated with obesity and mood disorders. Cancer Immunotherapy Immune Checkpoint Immunotherapy Targeted Therapy

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481