NTRK2
Recombinant Human TrkB / NTRK2 (His & Fc Tag)

Catalog No.	CRH384A-HisFc CRH384B-HisFc	**Quantity:**	100 µg 200 µg
Alternate Names:	BDNF/NT-3 growth factors receptor, GP145-TrkB, Trk-B, Neurotrophic tyrosine kinase receptor type 2, TrkB tyrosine kinase, Tropomyosin-related kinase B		
Description:	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.		
UniProt ID:	Q16620		
Accession Number:	NP_001007098.1		
Protein Construction:	A DNA sequence encoding the extracellular domain (Met 1-His 430) of human TrkB (NP_001007098.1) precursor was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the carboxy-terminus.		
Source:	HEK293 Cells		
Formulation:	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Molecular Weight:	The recombinant human TrkB/Fc is a disulfide-linked homodimer. The reduced monomer consists of 646 amino acids and has a predicted molecular mass of 72 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhTrkB/Fc monomer is approximately 110-120 kDa due to glycosylation.		
Purity:	> 90 % as determined by SDS-PAGE.		
Endotoxin Level:	< 1.0 EU per µg protein as determined by the LAL method.		
Biological Activity:	Measured by its ability to bind mouse BDNF in functional ELISA.		
Predicted N-terminal:	Cys 32		

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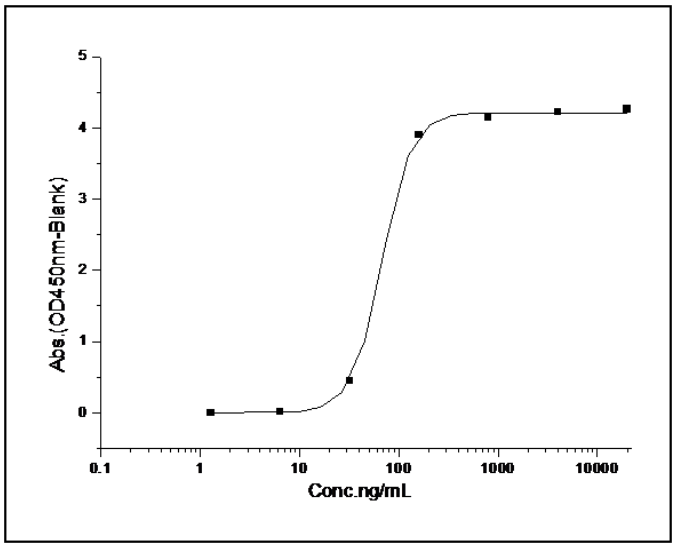
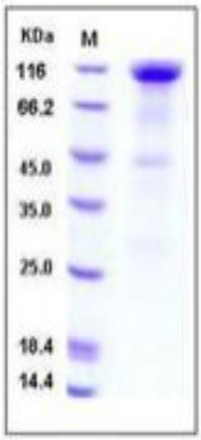
Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX**. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

Measured by its ability to bind mouse BDNF in functional ELISA.



SDS-PAGE



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