

Recombinant Human NTRK2 Protein, C-His-tagged

Product Information

Cat	IMP-5013
Official Symbol	NTRK2
Product Overview	Recombinant extracellular domain (Met 1-His 430) of human TrkB (NP_001007098.1) precursor was expressed with a C-terminal polyhistidine tag.
Description	<p>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.</p>
Expression System	HEK293
Species	Human
Tag	C-His
Predicted N Terminal	Cys 32
Form	Lyophilized from sterile PBS, pH 7.4, 5 % trehalose, 5% mannitol and 0.01% Tween80.
Molecular Mass	The recombinant human TrkB consists of 410 amino acids and has a predicted molecular mass of 45.7 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhTrkB is approximately 70-80 kDa due to glycosylation.
Protein length	Met1-His430
Endotoxin	< 1.0 EU/μg of the protein as determined by the LAL method
Purity	> 97 % as determined by SDS-PAGE

Storage

Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

SDS-PAGE