Active Recombinant Human NTRK3 Protein, His-tagged, Alexa Fluor 555 conjugated

Cat. No. NTRK3-160HAF555 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the extracellular domain (Met 1-Asp 428) of human TrkC (Alexa Fluor 555 conjugated) was expressed with a C-terminal polyhistide tag.
Species	Human
Source	HEK293
ProteinLength	Met1-Asp428
Description	NT-3 growth factor receptor is 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 caudate-putamen, septal nuclei, cerebellum, and brainstem. Other neurotrophins include nerve growth factor(NGF), neurotrophin-3 and neurotrophin-4. In the PNS, The 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

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	mechanism. Signaling through this kinase leads to cell differentiation and may play a role in the development of proprioceptive neurons that sense body position. Mutations in the TrkC encoding gene have been associated with medulloblastomas, secretory breast carcinomas, and other cancers.
Form	Lyophilized
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.
Molecular Mass	The recombinant human TrkC consists of 408 amino acids and has a calculated molecular mass of 46.1 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 80-90 kDa protein in SDS-PAGE under reducing conditions.
Endotoxin	< 1.0 EU/ μg of the protein as determined by the LAL method.
Purity	> 95 % as determined by SDS-PAGE
Characteristic	Disulfide-linked homodimer Labeled with Alexa Fluor 555 via amines With an excitation and emission maximum of 555/565 nm, Alexa Fluor 555 can be efficiently excited using a 543 nm He-Ne laser line and detected under standard TRITC/Cy3 filters.
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.

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Storage Buffer	Lyophilized from sterile PBS, pH 7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.25 mg/ml. Centrifuge the vial at 4 centigrade before opening to recover the entire contents.
Conjugation	Alexa Fluor 555

GENE INFORMATION

Gene Name	NTRK3 neurotrophic tyrosine kinase, receptor, type 3 [Homo sapiens]
Official Symbol	NTRK3
Synonyms	TRKC; GP145-TrkC; gp145(trkC)
Gene ID	4916
mRNA Refseq	NM_001007156
Protein Refseq	NP_001007157
MIM	191316
UniProt ID	Q16288

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