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## Ntrk2

## Recombinant Mouse TrkB / NTRK2 (His Tag)

Catalog No.CRM543A-HisQuantity:20 μg

CRM543B-His 50 μg

Alternate Names: BDNF/NT-3 growth factors receptor, GP145-TrkB/GP95-TrkB, Trk-B, Neurotrophic

tyrosine kinase receptor type 2, TrkB tyrosine kinase

**Description:** TrkB receptor is a single transmembrane catalytic receptors and 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 PLC gamma 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, 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. Signalling through this kinase leads to cell differentiation. Mutations in TrkB/NTRK have been associated

with obesity and mood disorders.

UniProt ID: P15209-2

**Protein Construction:** A DNA sequence encoding the extracellular domain of mouse NTRK2 (Met 1-His 429)

was expressed, with a C-terminal polyhistidine tag.

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 secreted rmNTRK2 consists of 409 aa with a predicted MW of 46 kDa and migrates

at ~75-85 kDa in SDS-PAGE under reducing conditions.

**Purity:** > 98 % as determined by SDS-PAGE.

**Endotoxin Level:** < 1.0 EU per µg protein as determined by the LAL method.

**Biological Activity:** In a functional ELISA, 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

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ng/ml.

Predicted N-terminal: Cys 32

**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.

Stable for up to 1 year from date of receipt at -20°C to -80°C

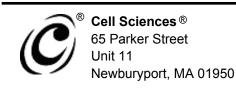
After reconstitution, store working aliquots at -20°C to -80°C.

Toll Free: 888-769-1246

Phone: 978-572-1070

Fax: 978-992-0298

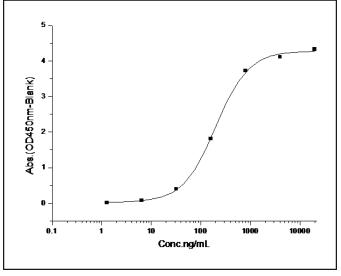
Avoid repeated freeze-thaw cycles.

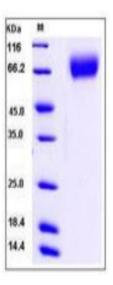


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Measured by its binding ability in a functional ELISA. Immobilized recombinant Mouse/Human BDNF Protein (Native) at 10 μg/ml (100 μl/well) can bind biotinylated mouse TrkB-His with a linear range of 10-80 ng/ml.

SDS-PAGE





NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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