Datasheet for ABIN7520363

TRKB Protein (His tag)

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Overview

Quantity:	100 µg
Target:	TRKB (NTRK2)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This TRKB protein is labelled with His tag.

Product Details

Purpose:	Active Recombinant Human Trk-B/NTRK2 Protein
Sequence:	CPTSCKCSAS RIWCSDPSPG IVAFPRLEPN SVDPENITEI FIANQKRLEI INEDDVEAYV GLRNLTIVDS GLKFVAHKAF LKNSNLQHIN FTRNKLTSLS RKHFRHLDLS ELILVGNPFT CSCDIMWIKT LQEAKSSPDT QDLYCLNESS KNIPLANLQI PNCGLPSANL AAPNLTVEEG KSITLSCSVA GDPVPNMYWD VGNLVSKHMN ETSHTQGSLR ITNISSDDSG KQISCVAENL VGEDQDSVNL TVHFAPTITF LESPTSDHHW CIPFTVKGNP KPALQWFYNG AILNESKYIC TKIHVTNHTE YHGCLQLDNP THMNNGDYTL IAKNEYGKDE KQISAHFMGW PGIDDGANPN YPDVIYEDYG TAANDIGDTT NRSNEIPSTD VTDKTGREH
Specificity:	Cys32-His430
Purity:	> 97 % by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	< 1.0 EU/µg of the protein by LAL method.

Product Details

Biological Activity Comment:	Measured by its binding ability in a functional ELISA. Immobilized Recombinant HumanTrkB, His Tag at 2 μg/mL (100 μL/well) can bind Recombinant Human BDNF with a linear range of 1.95-258 ng/mL.

Target Details

Target:	TRKB (NTRK2)
Alternative Name:	Trk-B/NTRK2 (NTRK2 Products)
Background:	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 and contains two Ig-like C2-type (immunoglobulin-like) domains, two LRR (leucine-rich) repeats, one LRRCT domain, one LRRNT domain, one protein kinase domain.TrkB/NTRK2 tyrosine kinase is coupled to the Ras, Cdc42/Rac/RhoG, MAPK, PI3-K and PLCgamma signaling pathways.TrkB/NTRK has high affinity for brain-derived neurotrophic factor (BDNF) and is involved in neuronal plasticity, longterm potentiation and apoptosis of CNS neurons. As a membrane-bound receptor, TrkB/NTRK binds upon neurotrophin, phosphorylates itself and members of the MAPK pathway. NTRK2 / TrkB involved in the development and the maturation of the central and the peripheral nervous systems through regulation of neuron survival, proliferation, migration, differentiation, and synapse formation and plasticity. Mutations in TrkB/NTRK have been associated with obesity and mood disorders. Name: NTRK2, GP145-TrkB, TRKB, trk-B, BDNF/NT-3 growth factors receptor,GP145-TrkB,TRKB,trk-B,TrkB,OBHD
Gene ID:	4915
UniProt:	Q16620
Pathways:	RTK Signaling, Neurotrophin Signaling Pathway, cAMP Metabolic Process, Skeletal Muscle Fiber Development, Feeding Behaviour, Dicarboxylic Acid Transport

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized

Handling

Reconstitution:	Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1 % BSA, 5 % HSA, 10 % FBS or 5 % Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.
Buffer:	Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.
Storage:	-20 °C,-80 °C
Storage Comment:	Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week.