Datasheet for ABIN7317672

TRKA Protein (His tag,Fc Tag)

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Overview

Quantity:	100 µg
Target:	TRKA (NTRK1)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This TRKA protein is labelled with His tag,Fc Tag.

Product Details

Purpose:	Recombinant Human TrkA/NTRK1 Protein (His & Fc Tag)(Active)
Sequence:	Met 1-Pro 382
Characteristics:	A DNA sequence encoding the human NTRK1 (NP_002520.2) extracellular domain (Met 1-Pro 382) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.
Purity:	> 98 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to inhibit NGF-induced proliferation of TF-1 human erythroleukemic cells. The ED50 for this effect is typically 0.04-0.15 µg/ml in the presence of 10 ng/ml of recombinant human NGF.

Target Details

Target:	TRKA (NTRK1)
Alternative Name:	TrkA/NTRK1 (NTRK1 Products)
Background:	Background: TRKA is a member of the neurotrophic tyrosine kinase receptor (NTKR) family. It is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and members of the MAPK pathway. Isoform TrkA-III promotes angiogenesis and has oncogenic activity when overexpressed. Isoform TrkA-I is found in most non-neuronal tissues. Isoform TrkA-II is primarily expressed in neuronal cells. TrkA-III is specifically expressed by pluripotent neural stem and neural crest progenitors. The presence of NTRK1 leads to cell differentiation and may play a role in specifying sensory neuron subtypes. Mutations in TRKA gene have been associated with congenital insensitivity to pain, anhidrosis, self-mutilating behavior, mental retardation and cancer. It was originally identified as an oncogene as it is commonly mutated in cancers, particularly colon and thyroid carcinomas. TRKA is required for high-affinity binding to nerve growth factor (NGF), neurotrophin-3 and neurotrophin-4/5 but not brain-derived neurotrophic factor (BDNF). Known substrates for the Trk receptors are SHC1, PI 3-kinase, and PLC-gamma-1. NTRK1 has a crucial role in the development and function of the nociceptive reception system as well as establishment of thermal regulation via sweating. It also activates ERK1 by either SHC1- or PLC-gamma-1-dependent signaling pathway. Defects in NTRK1 are a cause of congenital insensitivity to pain with anhidrosis and thyroid papillary carcinoma.Immune Checkpoint Immunotherapy Cancer Immunotherapy Targeted Therapy Synonym: MTC;p140-TrkA;TRK;Trk-A;TRK1;TRKA
Molecular Weight:	66 kDa
NCBI Accession:	NP_002520
Pathways:	RTK Signaling, Neurotrophin Signaling Pathway, cAMP Metabolic Process

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C

Handling

Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.