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Datasheet for ABIN727310
anti-TRKB antibody (AA 32-120)

2 Images

Overview

Quantity:	100 µL
Target:	TRKB (NTRK2)
Binding Specificity:	AA 32-120
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TRKB antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human Trk B
Isotype:	IgG
Predicted Reactivity:	Human,Mouse,Rat
Purification:	Purified by Protein A.

Target Details

Target:	TRKB (NTRK2)
Alternative Name:	TrkB (NTRK2 Products)
Background:	Synonyms: TRKB, trk-B, GP145-TrkB, BDNF/NT-3 growth factors receptor, Neurotrophic tyrosine kinase receptor type 2, TrkB tyrosine kinase, Tropomyosin-related kinase B, NTRK2

Target Details

Background: Receptor tyrosine kinase 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. Receptor for BDNF/brain-derived neurotrophic factor and NTF4/neurotrophin-4. Alternatively can also bind NTF3/neurotrophin-3 which is less efficient in activating the receptor but regulates neuron survival through NTRK2. Upon ligand-binding, undergoes homodimerization, autophosphorylation and activation. Recruits, phosphorylates and/or activates several downstream effectors including SHC1, FRS2, SH2B1, SH2B2 and PLCG1 that regulate distinct overlapping signaling cascades. Through SHC1, FRS2, SH2B1, SH2B2 activates the GRB2-Ras-MAPK cascade that regulates for instance neuronal differentiation including neurite outgrowth. Through the same effectors controls the Ras-PI3 kinase-AKT1 signaling cascade that mainly regulates growth and survival. Through PLCG1 and the downstream protein kinase C-regulated pathways controls synaptic plasticity. Thereby, plays a role in learning and memory by regulating both short term synaptic function and long-term potentiation. PLCG1 also leads to NF-Kappa-B activation and the transcription of genes involved in cell survival. Hence, it is able to suppress anoikis, the apoptosis resulting from loss of cell-matrix interactions. May also play a role in neurotrophin-dependent calcium signaling in glial cells and mediate communication between neurons and glia.

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

Application Notes:	WB 1:300-5000 ELISA 1:500-1000 IHC-P 1:200-400
Restrictions:	For Research Use only

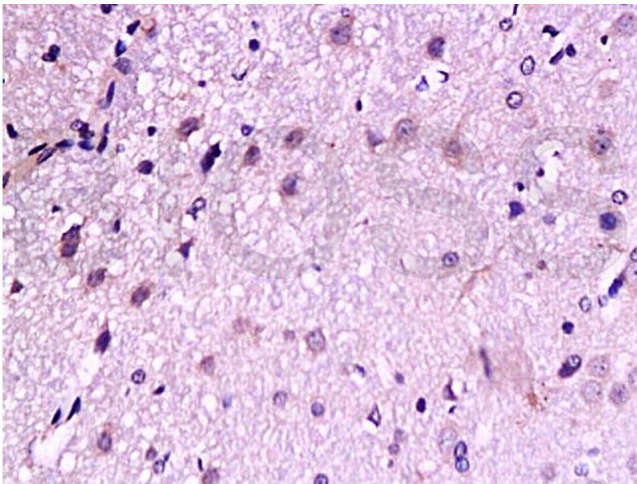
Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

Handling

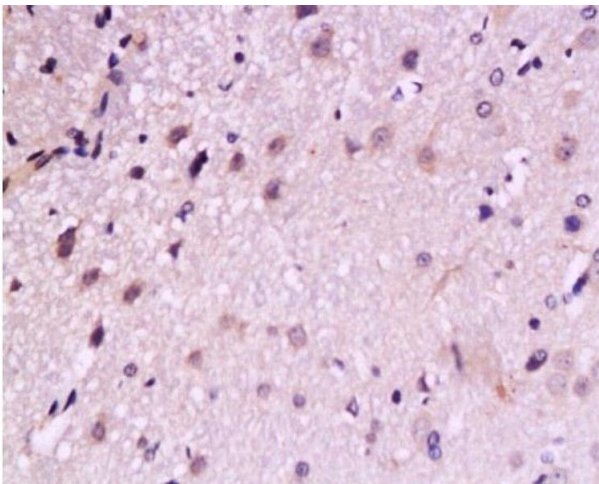
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Images



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded: rat brain tissue labeled with Anti-TrkB Polyclonal Antibody, Unconjugated (ABIN727310) at 1:200, followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Formalin-fixed and paraffin embedded: rat brain tissue labeled with Anti-TrkB Polyclonal Antibody, Unconjugated at 1:200, followed by conjugation to the secondary antibody and DAB staining