

Trk B (phospho Tyr516) Polyclonal Antibody

Catalog No: YP0269

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: Trk B

Fields: >>MAPK signaling pathway;>>Ras signaling pathway;>>Calcium signaling

pathway;>>PI3K-Akt signaling pathway;>>Neurotrophin signaling

pathway;>>Alcoholism

Gene Name: NTRK2

Protein Name: BDNF/NT-3 growth factors receptor

Q16620

P15209

Human Gene Id: 4915

Human Swiss Prot

No:

Mouse Gene Id: 18212

Mouse Swiss Prot

No:

Rat Gene ld: 25054

Rat Swiss Prot No: Q63604

Immunogen: The antiserum was produced against synthesized peptide derived from human

Trk B around the phosphorylation site of Tyr515. AA range:481-530

Specificity: Phospho-Trk B (Y516) Polyclonal Antibody detects endogenous levels of Trk B

protein only when phosphorylated at Y516.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

1/3



Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 145kD

Cell Pathway: MAPK_ERK_Growth;MAPK_G_Protein;Neurotrophin;

Background: This gene encodes 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. Signalling through this kinase leads to cell differentiation. Mutations in this gene have been associated with obesity and mood disorders. Alternative splicing

results in multiple transcript variants. [provided by RefSeq, May 2014],

Function: alternative products:Additional isoforms seem to exist, catalytic activity:ATP + a

[protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,function:Receptor

for brain-derived neurotrophic factor (BDNF), neurotrophin-3 and

neurotrophin-4/5 but not nerve growth factor (NGF). Involved in the development and/or maintenance of the nervous system. This is a tyrosine-protein kinase receptor. Known substrates for the TRK receptors are SHC1, PI-3 kinase, and PLC-gamma-1.,PTM:Ligand-mediated auto-phosphorylation.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family.,similarity:Belongs to the

protein kinase superfamily. Tyr protein kinase family. Insulin receptor

subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 2 Iglike C2-type (immunoglobulin-like) domains.,similarity:Contains 2 LRR (leucine-

rich) repeats., subunit: Exists in a dynamic equ

Subcellular Location:

Cell membrane ; Single-pass type I membrane protein . Endosome membrane ; Single-pass type I membrane protein . Early endosome membrane . Cell

projection, axon . Cell projection, dendrite . Cytoplasm, perinuclear region . Cell

junction, synapse, postsynaptic density. Internalized to endosomes upon ligand-

binding...

Expression: Isoform TrkB is expressed in the central and peripheral nervous system. In the

central nervous system (CNS), expression is observed in the cerebral cortex, hippocampus, thalamus, choroid plexus, granular layer of the cerebellum, brain stem, and spinal cord. In the peripheral nervous system, it is expressed in many cranial ganglia, the ophthalmic nerve, the vestibular system, multiple facial structures, the submaxillary glands, and dorsal root ganglia. Isoform TrkB-T1 is mainly expressed in the brain but also detected in other tissues including

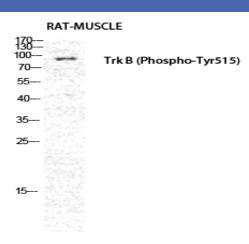
pancreas, kidney and heart. Isoform TrkB-T-Shc is predominantly expressed in

2/3

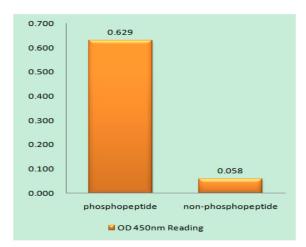


the brain.

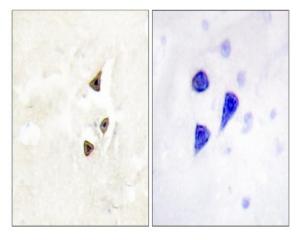
Products Images



Western Blot analysis of RAT-MUSCLE cells using Phospho-Trk B (Y516) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Trk B (Phospho-Tyr515) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using Trk B (Phospho-Tyr515) Antibody. The picture on the right is blocked with the phospho peptide.