

## 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
Human Gene Id :	4915
Human Swiss Prot	Q16620
No : Mouse Gene Id :	18212
Mouse Swiss Prot No :	P15209
Rat Gene Id :	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

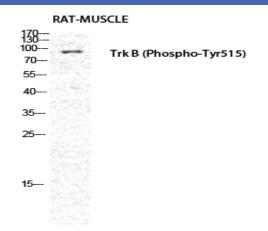


Best Tools for immunology Research	
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000 IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity- chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 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 lg-like 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

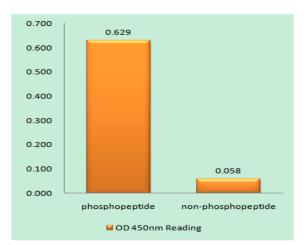


the brain.

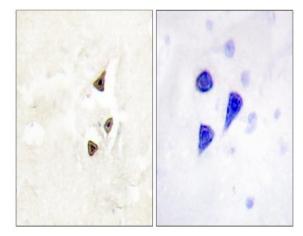
## **Products Images**



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.