

## Trk B (Phospho Tyr516) Rabbit pAb

CatalogNo: YP0269

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB, IHC, IF, ELISA

#### MW

- 145kd or 92kd (with limited samples) (Observed)

#### Isotype

- IgG

### Storage

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

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

### Recommended Dilution Ratios

**WB 1:500-1:2000**

**IHC 1:100-1:300**

**ELISA 1:5000**

**IF 1:50-200**

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**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. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):PQyFG

## Target Information

**Gene name** NTRK2

**Protein Name** BDNF/NT-3 growth factors receptor

Organism	Gene ID	UniProt ID
Human	<a href="#">4915</a> ;	<a href="#">Q16620</a> ;
Mouse	<a href="#">18212</a> ;	<a href="#">P15209</a> ;
Rat	<a href="#">25054</a> ;	<a href="#">Q63604</a> ;

## Cellular Localization

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. .

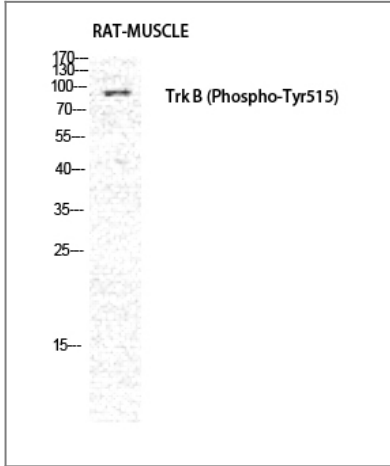
## Tissue specificity

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.

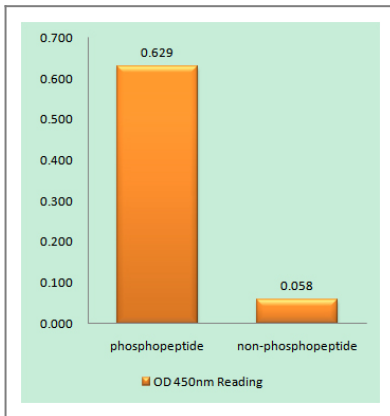
## Function

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 Ig-like C2-type (immunoglobulin-like) domains.,similarity:Contains 2 LRR (leucine-rich) repeats.,subunit:Exists in a dynamic equilibrium between monomeric (low affinity) and dimeric (high affinity) structures. Binds SH2B2. Interacts with SQSTM1 and KIDINS220.,tissue specificity:Isoform TrkB is widely expressed, mainly in the nervous tissue. In the 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 expressed in multiple tissues, mainly in brain, pancreas, kidney and heart. Isoform TrkB-T-Shc is predominantly expressed in brain.,

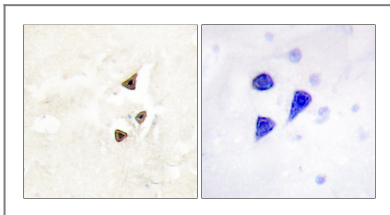
## Validation Data



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.

## Contact information

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Please scan the QR code to access additional product information:  
**Trk B (Phospho Tyr516) Rabbit pAb**

