

TrkA (Phospho Tyr490) /TrkB (Phospho Tyr516) (PT1381R) PT™ Rabbit mAb

CatalogNo: YM9223 **Recombinant** 

Key Features

Host Species

- Rabbit

Reactivity

- Human, Mouse, Rat

Applications

- WB, IF, IP, ELISA

MW

- 92kD, 87kD (Calculated)
- 92kD, 87kD (Observed)

Isotype

- IgG, Kappa

Storage

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

Formulation PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

Recommended Dilution Ratios

WB 1:2000-1:10000

IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200

Basic Information

Clonality Monoclonal

Clone Number PT1381R

Immunogen Information

Immunogen The specific immunogen used to produce this antibody is proprietary information.

Specificity TrkA (Phospho Tyr490)/TrkB (Phospho Tyr516) Antibody detects endogenous levels of TrkA/TrkB protein only when phosphorylated at Y490/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 When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports.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):GHILE/PQyFG

Target Information

Gene name NTRK1;MTC;TRK;TRKA;NTRK2;TRKB;

Protein Name High affinity nerve growth factor receptor;Neurotrophic tyrosine kinase receptor type 1;TRK1-transforming tyrosine kinase protein;Tropomyosin-related kinase A;Tyrosine kinase receptor;Tyrosine kinase receptor A;Trk-A;gp140trk;p140-TrkA;BDNF/NT-3 growth factors receptor;GP145-TrkB;Trk-B;Neurotrophic tyrosine kinase receptor type 2;TrkB tyrosine kinase;Tropomyosin-related kinase B;

Organism	Gene ID	UniProt ID
Human	4914 ; 4915 ; ;	P04629 ; Q16620 ;
Mouse	18211 ; 18212 ; ;	P15209 ; Q3UFB7 ; ;
Rat	25054 ; 29613 ; 59109 ; ;	Q03351 ; Q63604 ; ;

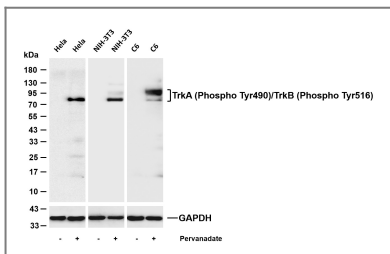
Cellular Localization Membrane

Tissue specificity 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. {ECO:0000269|PubMed:15488758, ECO:0000269|PubMed:8325889}. 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. {ECO:0000269|PubMed:11798182, ECO:0000269|PubMed:7936202}.TRKC: Widely expressed but mainly in nervous tissue. Isoform 2 is expressed at higher levels in adult brain than in fetal brain.

Function

Family of neurotrophic tyrosine kinase (NTRK1/2/3) genes which encode TrkA, TrkB and TrkC protein kinases. The three family members are activated by different neurotrophins: TrkA is activated by Nerve growth factor (NGF), TrkB by Brain-derived neurotrophic factor (BDNF) or neurotrophin-4 (NT-4) and TrkC by NT-3. Neurotrophin signalling activates cellular pathways involved in the development and the maturation of the central and peripheral nervous systems through regulation of proliferation, differentiation and survival of sympathetic and nervous neurons. Localization TrkA: Cell membrane. Early endosome membrane. Late endosome membrane. Internalized to endosomes upon binding of NGF or NT-3 and further transported to the cell body via a retrograde axonal transport. Localized at cell membrane and early endosomes before nerve growth factor (NGF) stimulation. Recruited to late endosomes after NGF stimulation. Colocalized with RAPGEF2 at late endosomes (By similarity). TrkB: Membrane. TrkC: Membrane.

Validation Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-TrkA (Phospho Tyr490)/TrkB (Phospho Tyr516) (PT1381R) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: Hela was treated with Pervanadate (10mM) for 1 hour Lane 3: NIH-3T3 Lane 4: NIH-3T3 was treated with Pervanadate (10mM) for 1 hour Lane 5: C6 Lane 6: C6 was treated with Pervanadate (10mM) for 1 hour Predicted band size: 92,87kDa Observed band size: 92,87kDa

Contact information

Orders: order@immunoway.com
Support: tech@immunoway.com
Telephone: 877-594-3616 (Toll Free), 408-747-0185
Website: <http://www.immunoway.com>
Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:

TrkA (Phospho Tyr490) /TrkB (Phospho Tyr516) (PT1381R) PT™ Rabbit mAb

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