

## Trk B Polyclonal Antibody

<b>Catalog No :</b>	YT4744
<b>Reactivity :</b>	Human;Mouse;Rat;CoIP
<b>Applications :</b>	WB;IHC;IF;mIHC;ELISA
<b>Target :</b>	Trk B
<b>Fields :</b>	>>MAPK signaling pathway;>>Ras signaling pathway;>>Calcium signaling pathway;>>PI3K-Akt signaling pathway;>>Neurotrophin signaling pathway;>>Alcoholism
<b>Gene Name :</b>	NTRK2
<b>Protein Name :</b>	BDNF/NT-3 growth factors receptor
<b>Human Gene Id :</b>	4915
<b>Human Swiss Prot No :</b>	Q16620
<b>Mouse Gene Id :</b>	18212
<b>Mouse Swiss Prot No :</b>	P15209
<b>Rat Gene Id :</b>	25054
<b>Rat Swiss Prot No :</b>	Q63604
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Trk B. AA range:481-530
<b>Specificity :</b>	Trk B Polyclonal Antibody detects endogenous levels of Trk B protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

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**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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

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**Observed Band :** 92kD

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**Cell Pathway :** MAPK\_ERK\_Growth;MAPK\_G\_Protein;Neurotrophin;

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**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],

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**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 equ

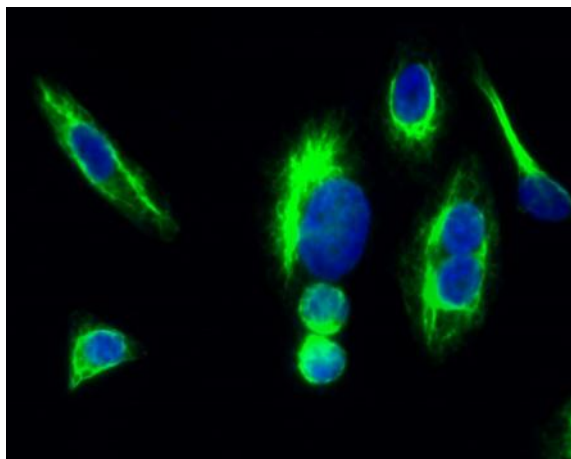
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**Subcellular Location :** Cell membrane ; Single-pass type I membrane protein . Endosome membrane ; Single-pass type I membrane protein . Early endosome membrane . Cell projection, axon . Cell projection, dendrite . Cytoplasm, perinuclear region . Cell junction, synapse, postsynaptic density . Internalized to endosomes upon ligand-binding. .

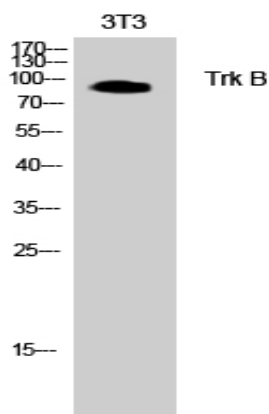
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**Expression :** Isoform TrkB is expressed in the central and peripheral nervous system. In the central nervous system (CNS), expression is observed in the cerebral cortex, hippocampus, thalamus, choroid plexus, granular layer of the cerebellum, brain 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

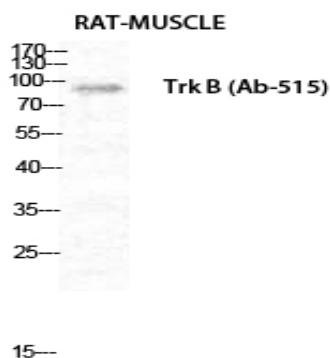
## Products Images



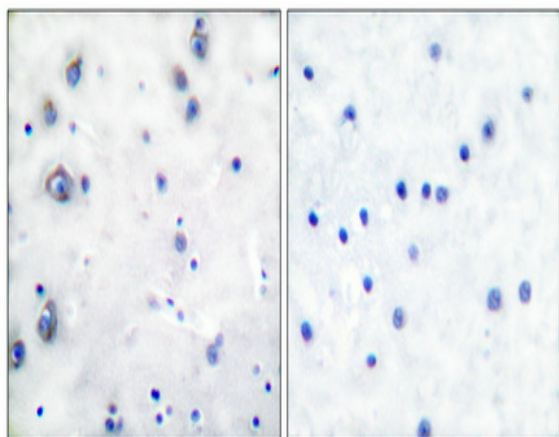
Immunofluorescence analysis of HeLa cell. 1, Trk B Polyclonal Antibody (green) was diluted at 1:200 (4 ° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000 (room temperature, 50min). 3 DAPI (blue) 10min.



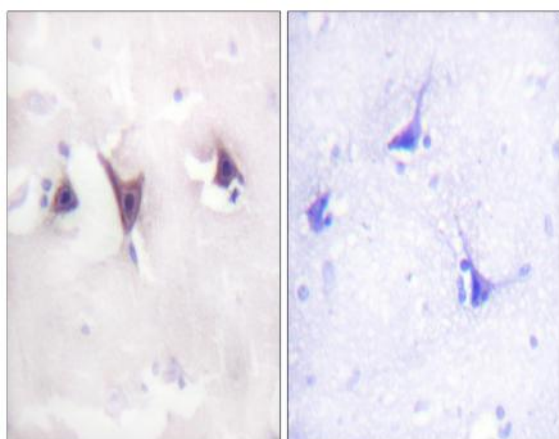
Western Blot analysis of rat brain cells using Trk B Polyclonal Antibody diluted at 1:500. Secondary antibody (catalog#:RS0002) was diluted at 1:20000



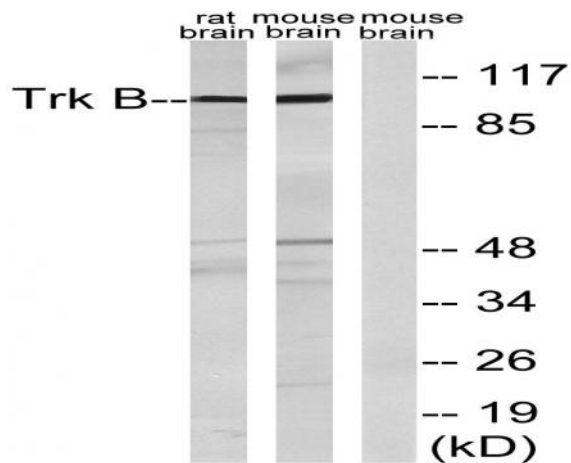
Western Blot analysis of RAT-MUSCLE cells using Trk B Polyclonal Antibody diluted at 1:500. Secondary antibody (catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

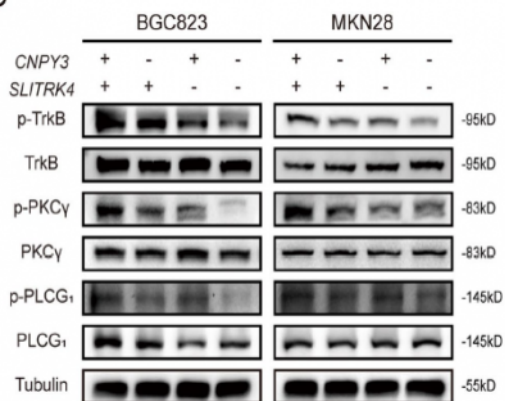


Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Trk B Antibody. The picture on the right is blocked with the synthesized peptide.



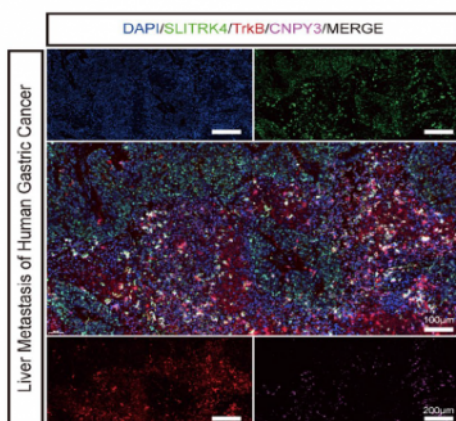
Western blot analysis of lysates from rat brain and mouse brain, treated with PBS 60', using Trk B Antibody. The lane on the right is blocked with the synthesized peptide.

**C**



The SLITRK4-CNPY3 axis promotes liver metastasis of gastric cancer by enhancing the endocytosis and recycling of TrkB in tumour cells CELLULAR ONCOLOGY Li Jun WB Human BGC823 cell, MKN28 cell

**A**



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