

# Summary

Production Name	Trk B Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC-P,IF-P,IF-F,ICC/IF,mIHC,ELISA
Reactivity	Human, Mouse, Rat, CoIP

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

#### Immunogen

Gene Name	NTRK2
Alternative Names	NTRK2; TRKB; BDNF/NT-3 growth factors receptor; GP145-TrkB; Trk-B; Neurotrophic
	tyrosine kinase receptor type 2; TrkB tyrosine kinase; Tropomyosin-related kinase B
Gene ID	4915.0
SwissProt ID	Q16620.The antiserum was produced against synthesized peptide derived from human
	Trk B. AA range:481-530

# Application

Dilution Ratio	WB 1:500-1:2000, IHC-P/mIHC 1:100-1:300, IF-P/IF-F/ICC/IF 1:200-1:1000, ELISA		
	1:10000.Not yet tested in other applications.		
Molecular Weight	92kDa		



### 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 RefSeg, May 2014], 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 tyrosineprotein kinase receptor. Known substrates for the TRK receptors are SHC1, PI-3 kinase, and PLC-gamma-1., PTM: Ligandmediated 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 ophtalmic 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.,

#### **Research Area**

MAPK\_ERK\_Growth;MAPK\_G\_Protein;Neurotrophin;

# Image Data



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

# Product Name: Trk B Rabbit Polyclonal Antibody Catalog #: APRab19285





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.



Western Blot analysis of rat brain cells using Trk B Polyclonal Antibody diluted at 1: 500. Secondary antibody was diluted at



Western Blot analysis of RAT-MUSCLE cells using Trk B Polyclonal Antibody diluted at 1: 500. Secondary antibody 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. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

**Note** For research use only.