



Trk A (phospho Tyr701) Polyclonal Antibody

Catalog No	YP-Ab-12647
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	NTRK1
Immunogen	The antiserum was produced against synthesized peptide derived from human Trk A around the phosphorylation site of Tyr701. AA range:666-715
Specificity	Phospho-Trk A (Y701) Polyclonal Antibody detects endogenous levels of Trk A protein only when phosphorylated at Y701.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Trk A;NTRK1;High affinity nerve growth factor receptor;MTC;TRK;TRKA; Neurotrophic tyrosine kinase receptor type 1;TRK1-transforming tyrosine kinase protein;Tropomyosin-related kinase A;Tyrosine kinase receptor;Tyrosine kinase receptor A
Observed Band	140-180kD
Calculated Molecular Weight	140-180kD
Cell Pathway	Cell membrane ; Single-pass type I membrane protein . Early endosome membrane ; Single-pass type I membrane protein . Late endosome membrane ; Single-pass type I membrane protein . Recycling endosome membrane ; Single-pass type I membrane protein . Rapidly internalized after NGF binding (PubMed:1281417). Internalized to endosomes upon binding of NGF or NTF3 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. .
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.

Function

alternative products: Both isoforms have similar biological properties, catalytic activity: $\text{ATP} + \text{a [protein]-L-tyrosine} = \text{ADP} + \text{a [protein]-L-tyrosine phosphate.}$, caution: The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data., disease: Chromosomal aberrations involving NTRK1 are a cause of thyroid papillary carcinoma (PACT) [MIM:188550]. Intrachromosomal rearrangement that links the protein kinase domain of NTRK1 to the 5'-end of the TPR gene forms the fusion protein TRK-T1. TRK-T1 is a 55 kDa protein reacting with antibodies against the C-terminus of the NTRK1 protein., disease: Chromosomal aberrations involving NTRK1 are a cause of thyroid papillary carcinoma (PACT) [MIM:188550]. Translocation t(1;3)(q21;q11) with TFG generates the TRKT3 (TRK-T3) transcript by fusing TFG to the 3'-end of NTRK1; a rearrangement with TPM3 gen

Background

This gene encodes a member of the neurotrophic tyrosine kinase receptor (NTRK) family. This kinase is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and members of the MAPK pathway. The presence of this kinase leads to cell differentiation and may play a role in specifying sensory neuron subtypes. Mutations in this gene have been associated with congenital insensitivity to pain, anhidrosis, self-mutilating behavior, mental retardation and cancer. Alternate transcriptional splice variants of this gene have been found, but only three have been characterized to date. [provided by RefSeq, Jul 2008],

matters needing attention

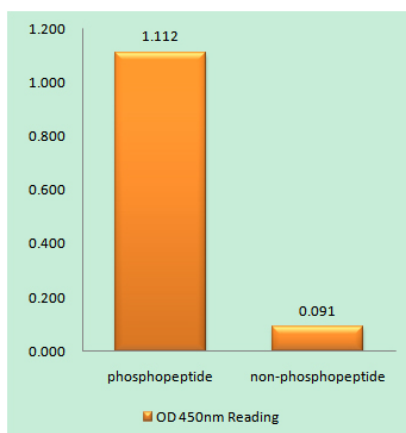
Avoid repeated freezing and thawing!

Usage suggestions

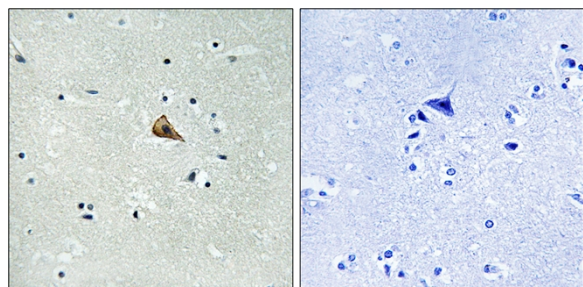
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



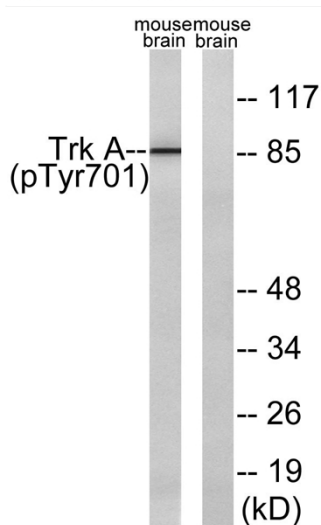
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Trk A (Phospho-Tyr701) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using Trk A (Phospho-Tyr701) Antibody. The picture on the right is blocked with the phosphopeptide.



Western blot analysis of lysates from mouse brain, using Trk A (Phospho-Tyr701) Antibody. The lane on the right is blocked with the phosphopeptide.