

## **Trk A Polyclonal Antibody**

YT4741 Catalog No:

Reactivity: Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

**Target:** Trk A

Fields: >>MAPK signaling pathway;>>Ras signaling pathway;>>Calcium signaling

> pathway;>>PI3K-Akt signaling pathway;>>Apoptosis;>>Neurotrophin signaling pathway;>>Inflammatory mediator regulation of TRP channels;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Thyroid cancer;>>Central

carbon metabolism in cancer

**Gene Name:** NTRK1

**Protein Name:** High affinity nerve growth factor receptor

**Human Gene Id:** 4914

**Human Swiss Prot** P04629

No:

Mouse Gene Id: 18211

**Mouse Swiss Prot** 

Q3UFB7

No:

Rat Gene Id: 59109

Rat Swiss Prot No: P35739

The antiserum was produced against synthesized peptide derived from human Immunogen:

Trk A. AA range:471-520

**Specificity:** Trk A Polyclonal Antibody detects endogenous levels of Trk A protein.

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

Source: Polyclonal, Rabbit, IgG



**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 140-180kD

**Cell Pathway :** MAPK\_ERK\_Growth;MAPK\_G\_Protein;Endocytosis;Apoptosis\_Inhibition;Apopt

osis Mitochondrial; Apoptosis Overview; Neurotrophin; Pathways in

cancer; Thyroid cancer;

**Background :** This gene encodes a member of the neurotrophic tyrosine kinase receptor

(NTKR) 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],

**Function:** alternative products:Both isoforms have similar biological properties,catalytic

activity:ATP + a [protein]-L-tyrosine = ADP + 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

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

against the C-terminus of the NTRK1 protein., disease: Chromosomal aberrations

TPM3 gen

Subcellular Location:

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.

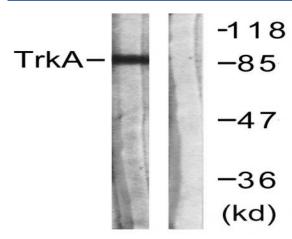


Colocalized with RAPGEF2 at late endosomes. .

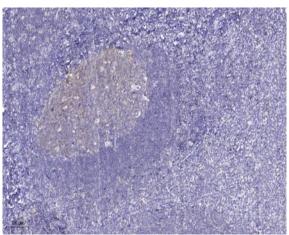
## **Expression:**

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.

## **Products Images**



Western blot analysis of lysates from Jurkat cells, using Trk A Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Tris-EDTA,pH9.0 was used for antigen retrieval. 2 Antibody was diluted at 1:200(4° overnight.3,Secondary antibody was diluted at 1:200(room temperature, 45min).