

**Trk A (phospho Tyr496) Polyclonal Antibody**

<b>Catalog No :</b>	YP1165
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IF;ELISA
<b>Target :</b>	Trk A
<b>Fields :</b>	>>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
<b>Gene Name :</b>	NTRK1
<b>Protein Name :</b>	High affinity nerve growth factor receptor
<b>Human Gene Id :</b>	4914
<b>Human Swiss Prot No :</b>	P04629
<b>Mouse Gene Id :</b>	18211
<b>Mouse Swiss Prot No :</b>	Q3UFB7
<b>Rat Gene Id :</b>	59109
<b>Rat Swiss Prot No :</b>	P35739
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Trk A around the phosphorylation site of Tyr496. AA range:471-520
<b>Specificity :</b>	Phospho-Trk A (Y496) Polyclonal Antibody detects endogenous levels of Trk A protein only when phosphorylated at Y496.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

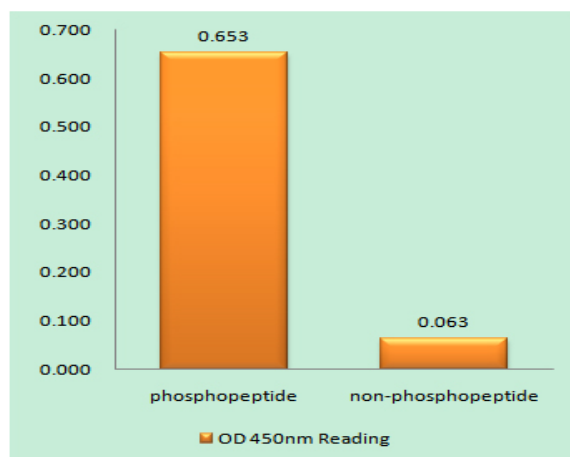
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500-2000 IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	140-180kD
<b>Cell Pathway :</b>	MAPK_ERK_Growth;MAPK_G_Protein;Endocytosis;Apoptosis_Inhibition;Apoptosis_Mitochondrial;Apoptosis_Overview;Neurotrophin;Pathways in cancer;Thyroid cancer;
<b>Background :</b>	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],
<b>Function :</b>	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 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
<b>Subcellular Location :</b>	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. .

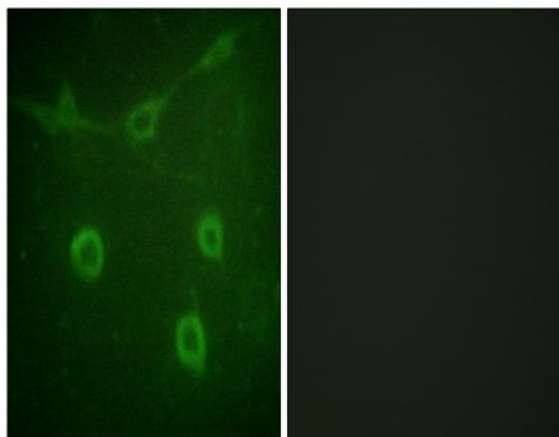
### Expression :

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



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Trk A (Phospho-Tyr496) Antibody



Immunofluorescence analysis of NIH/3T3 cells, using Trk A (Phospho-Tyr496) Antibody. The picture on the right is blocked with the phospho peptide.