

Trk A (phospho Tyr680/Y681) Polyclonal Antibody

Catalog No :	YP0418
Reactivity :	Human;Mouse;Rat
Applications :	WB;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 No :	P04629
Mouse Gene Id :	18211
Mouse Swiss Prot No :	Q3UFB7
Rat Gene Id :	59109
Rat Swiss Prot No :	P35739
Immunogen :	The antiserum was produced against synthesized peptide derived from human Trk A around the phosphorylation site of Tyr680 and Tyr681. AA range:646-695
Specificity :	Phospho-Trk A (Y680/Y681) Polyclonal Antibody detects endogenous levels of Trk A protein only when phosphorylated at Y680/Y681.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

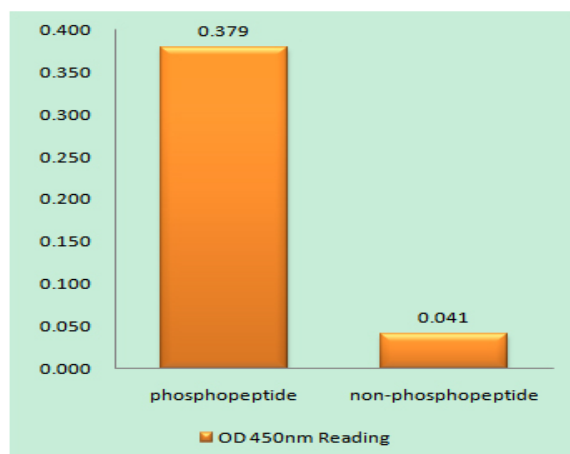
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. ELISA: 1:5000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -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;Apoptosis_Mitochondrial;Apoptosis_Overview;Neurotrophin;Pathways in cancer;Thyroid cancer;
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],
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 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
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. .

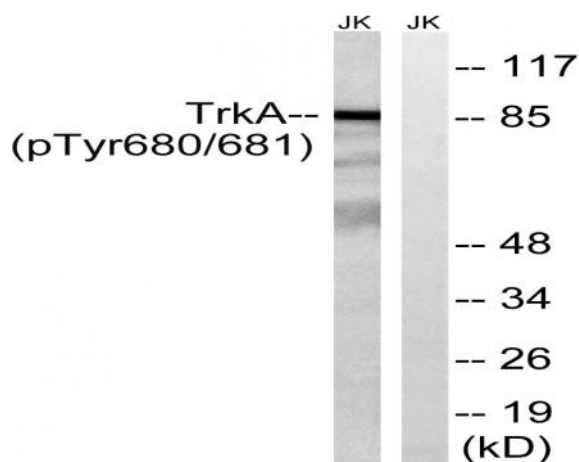
Expression :

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



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Trk A (Phospho-Tyr680+Tyr681) Antibody



Western blot analysis of lysates from Jurkat cells treated with starved 24h, using Trk A (Phospho-Tyr680+Tyr681) Antibody. The lane on the right is blocked with the phospho peptide.