

## Trk A Monoclonal Antibody

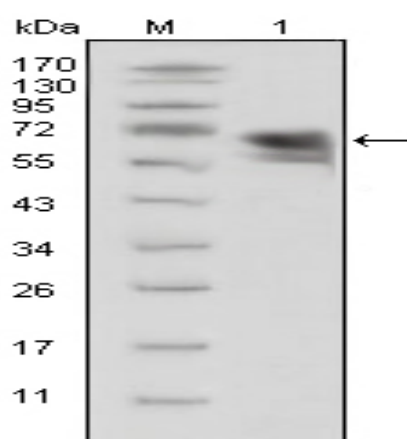
<b>Catalog No :</b>	YM0628
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;IF;ELISA
<b>Target :</b>	Trk A
<b>Fields :</b>	>>MAPK signaling pathway;>>Ras signaling pathway;>>Calcium signaling pathway;>>PI3K-Akt signaling pathway;>>Apoptosis;>>Neurotrophin signaling pathway;>>Inflammatory mediator regulation 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 Swiss Prot No :</b>	Q3UFB7
<b>Immunogen :</b>	Purified recombinant extracellular fragment of human Trk A (aa33-423) fused with hlgGfc tag expressed in HEK293 cell line.
<b>Specificity :</b>	Trk A Monoclonal Antibody detects endogenous levels of Trk A protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification

<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	87kD
<b>Cell Pathway :</b>	MAPK_ERK_Growth;MAPK_G_Protein;Endocytosis;Apoptosis_Inhibition;Apoptosis_Mitochondrial;Apoptosis_Overview;Neurotrophin;Pathways in cancer;Thyroid cancer;
<b>P References :</b>	<ol style="list-style-type: none"> <li>1. DNA Repair (Amst). 2008 Oct 1;7(10):1757-64.</li> <li>2. Traffic. 2008 Jul;9(7):1146-56.</li> </ol>
<b>Background :</b>	<p>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],</p>
<b>Function :</b>	<p>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</p>
<b>Subcellular Location :</b>	<p>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. .</p>
<b>Expression :</b>	<p>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.</p>

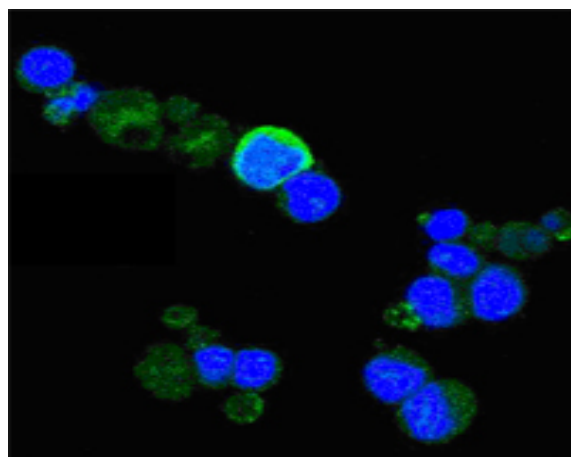
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**No4 :** 1

## Products Images



Western Blot analysis using Trk A Monoclonal Antibody against extracellular domain of human Trk A (aa33-423).



Confocal immunofluorescence analysis of PC-12 cells using Trk A Monoclonal Antibody (green), showing membrane and cytoplasmic localization. Blue: DRAQ5 fluorescent DNA dye.