Best Tools for immunology Research

Trk A Monoclonal Antibody

Catalog No :	YM0628
Reactivity :	Human
Applications :	WB;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 No :	P04629
Mouse Swiss Prot No :	Q3UFB7
Immunogen :	Purified recombinant extracellular fragment of human Trk A (aa33-423) fused with hIgGFc tag expressed in HEK293 cell line.
Specificity :	Trk A Monoclonal Antibody detects endogenous levels of Trk A protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification

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

Molecularweight : 87kD

Cell Pathway : MAPK_ERK_Growth;MAPK_G_Protein;Endocytosis;Apoptosis_Inhibition;Apoptosis_Mitochondrial;Apoptosis_Overview;Neurotrophin;Pathways in cancer;Thyroid cancer;

P References :
1. DNA Repair (Amst). 2008 Oct 1;7(10):1757-64.
2. Traffic. 2008 Jul;9(7):1146-56.

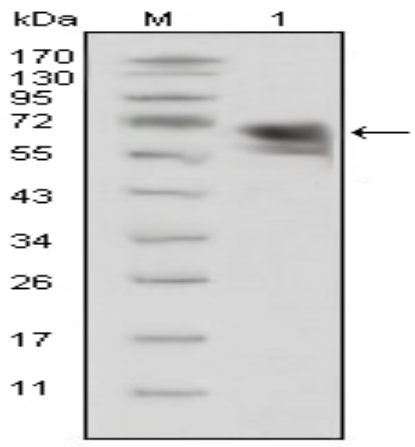
Background : This gene encodes a member of the neurotrophic tyrosine kinase receptor (NTKR) family. This kinase is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and members of the MAPK pathway. The presence of this kinase leads to cell differentiation and may play a 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 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

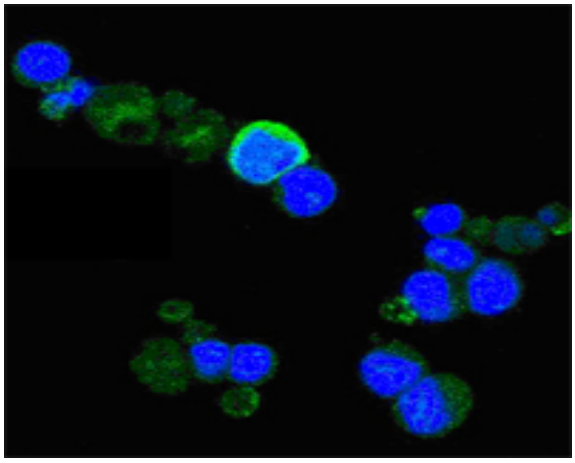
Subcellular Location : Cell membrane ; Single-pass type I membrane protein . Early endosome membrane ; Single-pass type I membrane protein . Late endosome membrane ; Single-pass type I membrane protein . Recycling endosome membrane ; Single-pass type I membrane protein . Rapidly internalized after NGF 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



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.