



Trk A Monoclonal Antibody

Catalog No	YP-Ab-12620
Isotype	IgG
Reactivity	Human
Applications	WB;IF;ELISA
Gene Name	NTRK1
Protein Name	High affinity nerve growth factor receptor
Immunogen	Purified recombinant extracellular fragment of human Trk A (aa33-423) fused with hlgGfc tag expressed in HEK293 cell line.
Specificity	Trk A Monoclonal Antibody detects endogenous levels of Trk A protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	NTRK1; MTC; TRK; TRKA; High affinity nerve growth factor receptor; Neurotrophic tyrosine kinase receptor type 1; TRK1-transforming tyrosine kinase protein; Tropomyosin-related kinase A; Tyrosine kinase receptor; Tyrosine kinase receptor A;
Observed Band	
Cell Pathway	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. .
Tissue Specificity	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.
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

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],

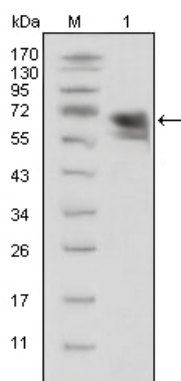
matters needing attention

Avoid repeated freezing and thawing!

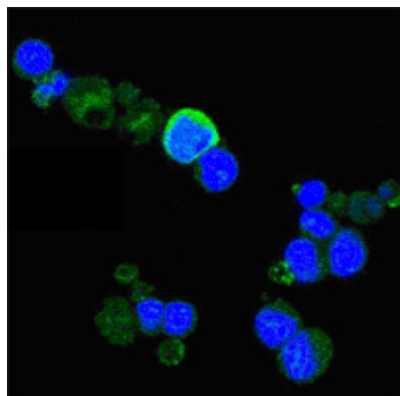
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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.