



Trk pan Rabbit mAb

Catalog No	YP-rAb-17650
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IF,IP,ELISA
Gene Name	NTRK1;MTC;TRK;TRKA;NTRK2;TRKB;NTRK3;TRKC
Protein Name	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;Trk-A;gp140trk;p140-TrkA;BDNF/NT-3 growth factors receptor;GP145-TrkB;Trk-B;Neurotrophic tyrosine kinase receptor type 2;TrkB tyrosine kinase;Tropomyosin-related kinase B;NT-3 growth factor receptor;GP145-TrkC;Trk-C;Neurotrophic tyrosine kinase receptor type 3;TrkC tyrosine kinase;
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
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	120-140kD
Calculated Molecular Weight	87kD
Cell Pathway	Membrane
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. {ECO:0000269 PubMed:15488758, ECO:0000269 PubMed:8325889}. Isoform TrkB is expressed in the central and peripheral nervous system. In the central nervous system (CNS), expression is observed in the cerebral cortex, hippocampus, thalamus, choroid plexus, granular





layer of the cerebellum, brain stem, and spinal cord. In the peripheral nervous system, it is expressed in many cranial ganglia, the ophthalmic nerve, the vestibular system, multiple facial structures, the submaxillary glands, and dorsal root ganglia. Isoform TrkB-T1 is mainly expressed in the brain but also detected in other tissues including pancreas, kidney and heart. Isoform TrkB-T-Shc is predominantly expressed in the brain. {ECO:0000269|PubMed:11798182, ECO:0000269|PubMed:7936202}. TRKC: Widely expressed but mainly in nervous tissue. Isoform 2 is expressed at higher levels in adult brain than in fetal brain.

Function

Family of neurotrophic tyrosine kinase (NTRK1/2/3) genes which encode TrkA, TrkB and TrkC protein kinases. The three family members are activated by different neurotrophins: TrkA is activated by Nerve growth factor (NGF), TrkB by Brain-derived neurotrophic factor (BDNF) or neurotrophin-4 (NT-4) and TrkC by NT-3. Neurotrophin signalling activates cellular pathways involved in the development and the maturation of the central and peripheral nervous systems through regulation of proliferation, differentiation and survival of sympathetic and nervous neurons. Localization TrkA: Cell membrane. Early endosome membrane. Late endosome membrane. Internalized to endosomes upon binding of NGF or NT-3 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 (By similarity). TrkB: M embrane. TrkC: Membrane.

Background

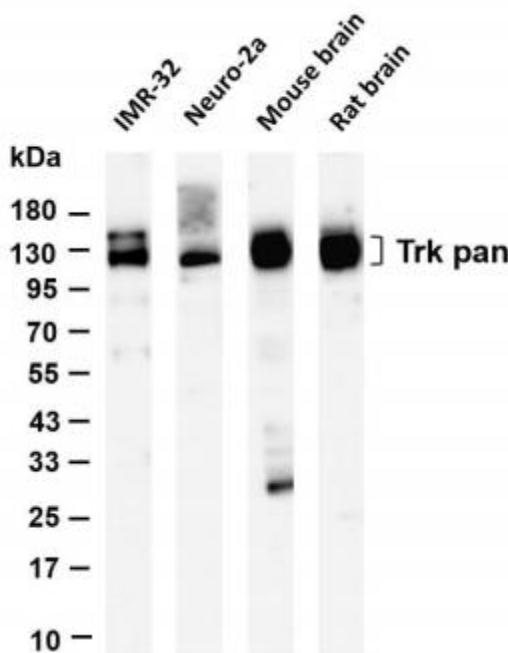
This gene encodes a member of the neurotrophic tyrosine kinase receptor (NTRK) family. This kinase is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and members of the MAPK pathway. The presence of this kinase leads to cell differentiation and may play a role in specifying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



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Trk pan antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: IMR-32 Lane 2: Neuro-2a Lane 3: Mouse brain Lane 4: Rat brain Predicted band size: 87kDa Observed band size: 120-140kDa

