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## anti-TRKB antibody (pTyr817)

**Images** 



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Quantity:	100 μL
Target:	TRKB (NTRK2)
Binding Specificity:	pTyr817
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Monoclonal
Conjugate:	This TRKB antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)),
	Immunofluorescence (Cultured Cells) (IF (cc))
Product Details	
Immunogen:	KLH conjugated Synthesised phosphopeptide derived from human NTRK2 around the
	phosphorylation site of Tyr817:PV(p-Y)LD
Clone:	2A1
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	Purified by Protein A.
Target Details	
Target:	TRKB (NTRK2)

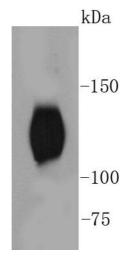
### **Target Details**

Alternative Name:	TrkB (NTRK2 Products)
Background:	Synonyms: TRKB, trk-B, GP145-TrkB, BDNF/NT-3 growth factors receptor, Neurotrophic
	tyrosine kinase receptor type 2, TrkB tyrosine kinase, Tropomyosin-related kinase B, NTRK2
	Background: Receptor tyrosine kinase involved in the development and the maturation of the
	central and the peripheral nervous systems through regulation of neuron survival, proliferation
	migration, differentiation, and synapse formation and plasticity. Receptor for BDNF/brain-
	derived neurotrophic factor and NTF4/neurotrophin-4. Alternatively can also bind
	NTF3/neurotrophin-3 which is less efficient in activating the receptor but regulates neuron
	survival through NTRK2. Upon ligand-binding, undergoes homodimerization,
	autophosphorylation and activation. Recruits, phosphorylates and/or activates several
	downstream effectors including SHC1, FRS2, SH2B1, SH2B2 and PLCG1 that regulate distinct
	overlapping signaling cascades. Through SHC1, FRS2, SH2B1, SH2B2 activates the GRB2-Ras
	MAPK cascade that regulates for instance neuronal differentiation including neurite outgrowth
	Through the same effectors controls the Ras-PI3 kinase-AKT1 signaling cascade that mainly
	regulates growth and survival. Through PLCG1 and the downstream protein kinase C-regulate
	pathways controls synaptic plasticity. Thereby, plays a role in learning and memory by
	regulating both short term synaptic function and long-term potentiation. PLCG1 also leads to
	NF-Kappa-B activation and the transcription of genes involved in cell survival. Hence, it is able
	to suppress anoikis, the apoptosis resulting from loss of cell-matrix interactions. May also pla
	a role in neutrophin-dependent calcium signaling in glial cells and mediate communication
	between neurons and glia.
Gene ID:	4915
JniProt:	Q16620
Pathways:	RTK Signaling, Neurotrophin Signaling Pathway, cAMP Metabolic Process, Skeletal Muscle
	Fiber Development, Feeding Behaviour, Dicarboxylic Acid Transport
Application Details	
Application Notes:	WB 1:300-5000
	IHC-P 1:200-400
	IF(ICC) 1:50-200

#### Handling

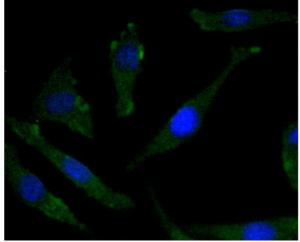
Format:	Liquid
Concentration:	1 μg/μL
Buffer:	Aqueous buffered solution containing 1xTBS (pH 7.4), 1 % BSA, 40 %Glycerol and 0.05 % Sodium Azide.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

#### **Images**



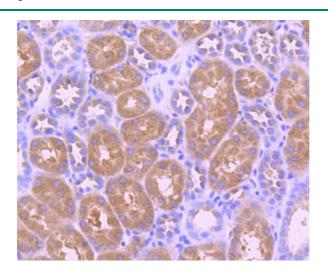
#### **Western Blotting**

**Image 1.** Mouse brain lysates, probed with TrkB(Y817) (2A1 ) Monoclonal Antibody at 1:1000 overnight at 4°C. Followed by a conjugated secondary antibody.



#### **Immunofluorescence (Cultured Cells)**

**Image 2.** SH-SY-5Y cells were stained with TrkB(Y817) (2A1 ) Monoclonal Antibody at [1:200] incubated overnight at 4C, followed by secondary antibody incubation, DAPI staining of the nuclei and detection.



#### Immunohistochemistry (Paraffin-embedded Sections)

**Image 3.** Paraformaldehyde-fixed, paraffin embedded human kidney, Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer at 37°C for 20min, Antibody incubation with TrkB (Tyr817) (2A1) Monoclonal Antibody at 1:50 overnight at 4°C, followed by a conjugated secondary and DAB staining.