Datasheet for ABIN746618

anti-TRKA antibody (pTyr680, pTyr681)

1 Image

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Overview

Quantity:	100 µL
Target:	TRKA (NTRK1)
Binding Specificity:	pTyr680, pTyr681
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TRKA antibody is un-conjugated
Application:	ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human TrkB around the phosphorylation site of Tyr680/681
Isotype:	IgG
Specificity:	The phosphorylation sites Tyr680 and Tyr681 in TrkA are homologous to those of Tyr683 and Tyr683 in Mouse and Rat. These sites in TrkB are homologous to those of Tyr705 and Tyr706 in Mouse and Rat.
Cross-Reactivity:	Human, Rat
Predicted Reactivity:	Mouse
Purification:	Purified by Protein A.

Target Details

Target:	TRKA (NTRK1)
Alternative Name:	TrkA+ TrkB + (NTRK1 Products)
Background:	Synonyms: MTC, TRK, TRK1, TRKA, Trk-A, p140-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, gp140trk, NTRK1 Background: Receptor tyrosine kinase 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. High affinity receptor for NGF which is its primary ligand, it can also bind and be activated by NTF3/neurotrophin-3. However, NTF3 only supports axonal extension through NTRK1 but has no effect on neuron survival. Upon dimeric NGF 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 driving cell survival and differentiation. Through SHC1 and FRS2 activates a GRB2-Ras-MAPK cascade that regulates cell differentiation and survival. Through PLCG1 controls NF-Kappa-B activation and the transcription of genes involved in cell survival. Through SHC1 and SH2B1 controls a Ras-PI3 kinase-AKT1 signaling cascade that is also regulating survival. In absence of ligand and activation, may promote cell death, making the survival of neurons dependent on trophic factors. Isoform TrkA-III is resistant to NGF, constitutively activates AKT1 and NF-kappa-B and is unable to activate the Ras-MAPK signaling cascade. Antagonizes the anti-proliferative NGF-NTRK1 signaling that promotes neuronal precursors differentiation. Isoform TrkA-III promotes angiogenesis and has oncogenic activity when overexpressed.
Gene ID:	4914
UniProt:	P04629
Pathways:	RTK Signaling, Neurotrophin Signaling Pathway, cAMP Metabolic Process

Application Details

Application Notes:	ELISA 1:500-1000
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200

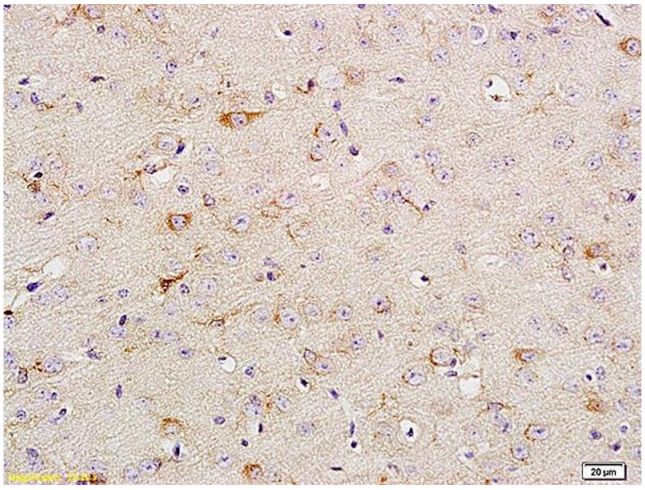
Application Details

	IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
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



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded rat brain tissue labeled with Anti Phospho-TrkA (Tyr674/675) /TrkB (Tyr706/707) Polyclonal Antibody, Unconjugated (ABIN746618) at 1:200 followed by conjugation to the secondary antibody and DAB staining.