

Trk A (Phospho-Tyr701) Antibody

Catalog No: #12115

Package Size: #12115-1 50ul #12115-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

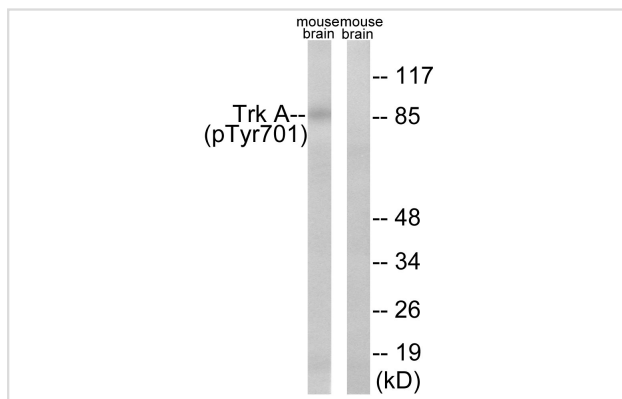
Product Name	Trk A (Phospho-Tyr701) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IHC
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of Trk A only when phosphorylated at tyrosine 701.
Immunogen Type	peptide
Immunogen Description	Peptide sequence around phosphorylation site of tyrosine 701 (I-L-Y(p)-R-K) derived from Human Trk A.
Target Name	Trk A
Modification	Phospho
Other Names	EC 2.7.10.1; High affinity nerve growth factor receptor precursor; kinase TrkA; NTRK1; p140-TrkA; Slow nerve growth factor receptor; TRK; Trk-A; TRK1 transforming tyrosine kinase protein; TRKA
Accession No.	Swiss-Prot#:P04629;NCBI Gene#:4914
Uniprot	P04629
GeneID	4914;
SDS-PAGE MW	87kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

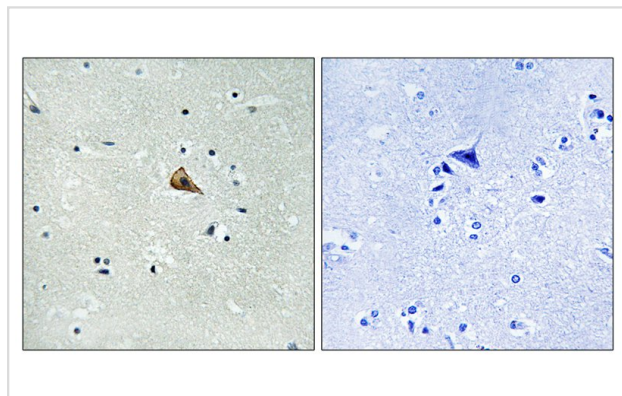
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

Images



Western blot analysis of extracts from mouse brain cells, using Trk A (Phospho-Tyr701) antibody #12115. The lane on the right is treated with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue using Trk A (Phospho-Tyr701) antibody #12115. The picture on the right is treated with the synthesized peptide.

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.

Note: This product is for in vitro research use only