Data Sheet (Cat.No.TMAC-04122)

Anti-Phospho-TrkA (Tyr701) Polyclonal Antibody

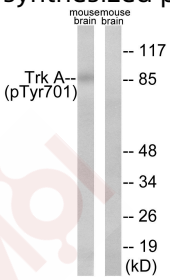
Product Details

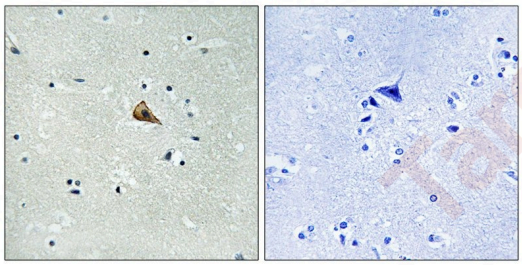
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Actual: 87 kDa.
Purification:	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.

Applications

Verified Activity:

1. Western blot analysis of extracts from mouse brain cells, using Trk A (Phospho-Tyr701) antibody TMAC-04122. The lane on the right is treated with the synthesized peptide.
2. Immunohistochemistry analysis of paraffin-embedded human brain tissue using Trk A (Phospho-Tyr701) antibody TMAC-04122. The picture on the right is treated with the synthesized peptide.





Application:	IHC,WB
Recommended	WB: 1:500-3000; IHC: 1:50-100

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Peptide sequence around phosphorylation site of tyrosine 701 (I-L-Y(p)-R-K) derived from Human Trk A
Antigen Species:	Human
Uniprot ID:	P04629
Synonyms:	p-TrkA (Y701);TrkA (p-Tyr701);p-TrkA (Tyr701);TrkA (p-Y701)

Research 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.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481