

## Trk A (Phospho-Tyr701) Conjugated Antibody

Catalog No: #C12115



Package Size: #C12115-AF350 100ul #C12115-AF405 100ul #C12115-AF488 100ul  
 #C12115-AF555 100ul #C12115-AF594 100ul #C12115-AF647 100ul  
 #C12115-AF680 100ul #C12115-AF750 100ul #C12115-Biotin 100ul

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## Description

Product Name	Trk A (Phospho-Tyr701) Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of Trk A only when phosphorylated at tyrosine 701.
Immunogen Description	Peptide sequence around phosphorylation site of tyrosine 701 (I-L-Y(p)-R-K) derived from Human Trk A.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
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#:P04629NCBI Gene ID:4914
Uniprot	P04629
GeneID	4914;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	87
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

## Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250  
 AF405 conjugated: most applications: 1: 50 - 1: 250  
 AF488 conjugated: most applications: 1: 50 - 1: 250  
 AF555 conjugated: most applications: 1: 50 - 1: 250  
 AF594 conjugated: most applications: 1: 50 - 1: 250  
 AF647 conjugated: most applications: 1: 50 - 1: 250  
 AF680 conjugated: most applications: 1: 50 - 1: 250  
 AF750 conjugated: most applications: 1: 50 - 1: 250

## Product Description

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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.

## Background

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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.

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Note: This product is for in vitro research use only