



Rabbit Anti-NTRK1, NTR2, NTRK3 monoclonal antibody, clone KK195-15 (CABT-L818)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	TrkA+B+C
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	KK195-15
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC, IHC
Molecular Weight	140 kDa
Cellular Localization	Membrane, Endosome membrane.
Positive Control	N2A, SH-SY-5Y, rat brain tissue, mouse liver tissue, mouse brain tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.
Preservative	0.05% Sodium Azide

Storage

Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

BACKGROUND

Introduction

The family of Trk receptor tyrosine kinases consists of TrkA, TrkB, and TrkC. While the sequence of these family members is highly conserved, they are activated by different neurotrophins: TrkA by NGF, TrkB by BDNF or NT4, and TrkC by NT3. In the adult nervous system, the Trk receptors regulate synaptic strength and plasticity. TrkA regulates proliferation and is important for development and maturation of the nervous system. Point mutations, deletions, and chromosomal rearrangements (chimeras) cause ligand-independent receptor dimerization and activation of TrkA. TrkA is activated in many malignancies including breast, ovarian, prostate, and thyroid carcinomas. TrkB is overexpressed in tumors such as neuroblastoma, prostate adenocarcinoma and pancreatic ductal adenocarcinoma. In neuroblastomas overexpression of TrkB correlates with unfavorable disease outcome when autocrine loops signaling tumor survival are potentiated by additional overexpression of brain-derived neurotrophic factor (BDNF). An alternatively spliced truncated TrkB isoform lacking the kinase domain is overexpressed in Wilms' tumors and this isoform may act as a dominant-negative to TrkB signaling. Altered TrkC expression and corresponding gene mutations are seen in various forms of cancer, with increased expression a positive prognostic indicator in patients with medulloblastoma.

Keywords

BDNF/NT-3 growth factors receptor;gp140trk;GP145-TrkB;GP145-TrkC;High affinity nerve growth factor receptor;MTC;Neurotrophic tyrosine kinase receptor type 1;Neurotrophic tyrosine kinase receptor type 2;Neurotrophic tyrosine kinase receptor type 3;NT-3 growth factor receptor;NTRK1;NTRK2;NTRK3;p140-TrkA;TRK;Trk-A;Trk-B;Trk-C;TRK1-transforming tyrosine kinase protein;TRKA;TRKB;TrkB tyrosine kinase;TRKC;TrkC tyrosine kinase;Tropomyosin-related kinase A;Tropomyosin-related kinase B;Tyrosine kinase receptor A;Tyrosine kinase receptor antibody
