

Datasheet for ABIN4912550  
**anti-TRKB antibody**

2 Images



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## Overview

Quantity:	100 µL
Target:	TRKB (NTRK2)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This TRKB antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

## Product Details

Immunogen:	This NTRK2 antibody is generated from a mouse immunized with a recombinant protein.
Clone:	14C9
Isotype:	IgG1
Cross-Reactivity:	Human
Purification:	Purified by Protein G.

## Target Details

Target:	TRKB (NTRK2)
Alternative Name:	NTRK2 ( <a href="#">NTRK2 Products</a> )
Background:	Synonyms: TRKB, trk-B, GP145-TrkB, BDNF/NT-3 growth factors receptor, Neurotrophic tyrosine kinase receptor type 2, TrkB tyrosine kinase, Tropomyosin-related kinase B, NTRK2

## Target Details

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Background: Receptor tyrosine kinase involved in the development and the maturation of the central and the peripheral nervous systems through regulation of neuron survival, proliferation, migration, differentiation, and synapse formation and plasticity. Receptor for BDNF/brain-derived neurotrophic factor and NTF4/neurotrophin-4. Alternatively can also bind NTF3/neurotrophin-3 which is less efficient in activating the receptor but regulates neuron survival through NTRK2. Upon 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. Through SHC1, FRS2, SH2B1, SH2B2 activates the GRB2-Ras-MAPK cascade that regulates for instance neuronal differentiation including neurite outgrowth. Through the same effectors controls the Ras-PI3 kinase-AKT1 signaling cascade that mainly regulates growth and survival. Through PLCG1 and the downstream protein kinase C-regulated pathways controls synaptic plasticity. Thereby, plays a role in learning and memory by regulating both short term synaptic function and long-term potentiation. PLCG1 also leads to NF-Kappa-B activation and the transcription of genes involved in cell survival. Hence, it is able to suppress anoikis, the apoptosis resulting from loss of cell-matrix interactions. May also play a role in neurotrophin-dependent calcium signaling in glial cells and mediate communication between neurons and glia.

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Gene ID: 4915

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UniProt: [Q16620](#)

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Pathways: [RTK Signaling](#), [Neurotrophin Signaling Pathway](#), [cAMP Metabolic Process](#), [Skeletal Muscle Fiber Development](#), [Feeding Behaviour](#), [Dicarboxylic Acid Transport](#)

## Application Details

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Application Notes: WB 1:300-5000  
IHC-P 1:200-400

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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Concentration: 0.5 µg/µL

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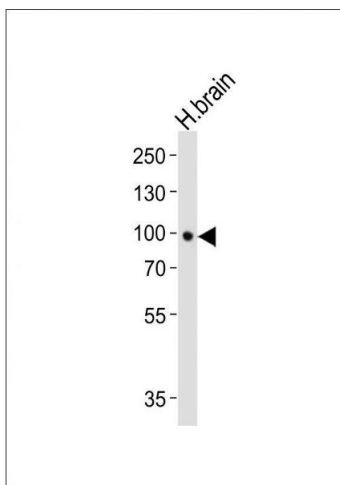
Buffer: 0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

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## Handling

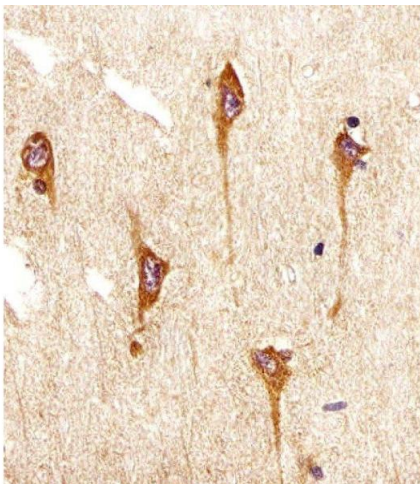
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

## Images



### Western Blotting

**Image 1.** Lane 1: Human Brain lysates, probed with NTRK2 (1446CT494.85.83.49) Monoclonal Antibody, unconjugated (bsm-51294M) at 1:1000 overnight at 4°C followed by a conjugated secondary antibody for 60 minutes at 37°C.



### Immunohistochemistry (Paraffin-embedded Sections)

**Image 2.** Paraformaldehyde-fixed, paraffin embedded human brain tissue, Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 15 minutes, Blocking buffer (3% BSA) at room temperature for 30min, Antibody incubation with NTRK2 (1446CT494.85.83.49) Monoclonal Antibody (bsm-51294M) at 1:25 for 1 hour at 37°C, followed by a conjugated secondary antibody for 20 minutes and DAB staining.