

# Anti-TrkC Antibody

Catalog # ABO11300

#### Specification

# Anti-TrkC Antibody - Product Information

ApplicationWBPrimary AccessionQ16288HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit lgG polyclonal antibody for NT-3 growth factor receptor(NTRK3) detection. Tested with WB in Human:Mouse:Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Anti-TrkC Antibody - Additional Information

Gene ID 4916

**Other Names** NT-3 growth factor receptor, 2.7.10.1, GP145-TrkC, Trk-C, Neurotrophic tyrosine kinase receptor type 3, TrkC tyrosine kinase, NTRK3, TRKC

Calculated MW 94428 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

Subcellular Localization Membrane; Single-pass type I membrane protein.

**Tissue Specificity** Widely expressed but mainly in nervous tissue. Isoform 2 is expressed at higher levels in adult brain than in fetal brain.

Protein Name NT-3 growth factor receptor

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human TrkC(172-186aa QLWQEQGEAKLNSQN), different from the related rat and mouse sequences by three amino acids.



**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily.

#### **Anti-TrkC Antibody - Protein Information**

Name NTRK3

Synonyms TRKC

Function

Receptor tyrosine kinase involved in nervous system and probably heart development. Upon binding of its ligand NTF3/neurotrophin-3, NTRK3 autophosphorylates and activates different signaling pathways, including the phosphatidylinositol 3-kinase/AKT and the MAPK pathways, that control cell survival and differentiation.

**Cellular Location** Membrane; Single-pass type I membrane protein.

**Tissue Location** Widely expressed but mainly in nervous tissue. Isoform 2 is expressed at higher levels in adult brain than in fetal brain

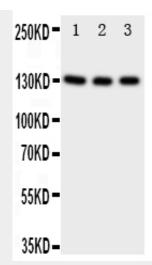
### **Anti-TrkC Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-TrkC Antibody - Images





Anti-TrkC antibody, ABO11300, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Mouse Brain Tissue LysateLane 3: U87 Cell Lysate

# Anti-TrkC Antibody - Background

NTRK3(Neurotrophic Tyrosine Kinase Receptor Type 3), also known as TRKC, is a protein that in humans is encoded by the NTRK3 gene. By PCR analysis of a somatic cell hybrid panel and by fluorescence in situ hybridization with the cDNA clone, McGregor et al.(1994) mapped the NTRK3 gene to 15q24-q25. Lamballe et al.(1991) isolated and characterized TRKC, a member of the TRK family of tyrosine protein kinase genes. They found that TRKC is preferentially expressed in the brain; in situ hybridization studies showed transcripts in the hippocampus, cerebral cortex, and the granular cell layer of the cerebellum. By functional studies in HeLa cells, Muinos-Gimeno et al.(2009) demonstrated that 5 miRNAs regulate the truncated form of NTRK3.