abcam

## Product datasheet

# Recombinant human TrkB protein ab56652

1 References 4 Images

### Description

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|---|---|
| **Product name** | Recombinant human TrkB protein |
| **Purity** | > 80 % Densitometry.<br>Affinity purified. |
| **Expression system** | Baculovirus infected Sf9 cells |
| **Accession** | Q16620-1 |
| **Protein length** | Protein fragment |
| **Animal free** | No |
| **Nature** | Recombinant |
| **Species** | Human |
| **Amino acids** | 455 to 822 |

### Specifications

Our **Abpromise guarantee** covers the use of **ab56652** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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|---|---|
| **Applications** | SDS-PAGE<br>Functional Studies |
| **Form** | Liquid |
| **Additional notes** | **ab204877** (Poly (4:1 Glu, Tyr) peptide) can be utilized as a substrate for assessing kinase activity |

### Preparation and Storage

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| **Stability and Storage** | Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles.<br>pH: 7.50<br>Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride<br>This product is an active protein and may elicit a biological response in vivo, handle with caution. |

### General Info

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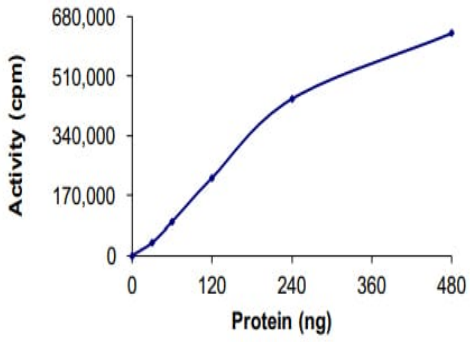
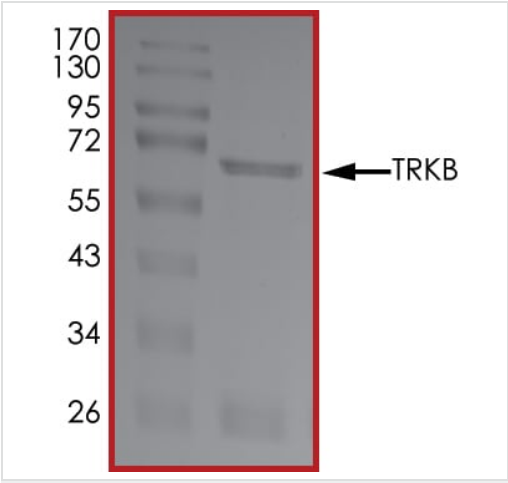
|---|---|
| **Function** | Receptor for brain-derived neurotrophic factor (BDNF), neurotrophin-3 and neurotrophin-4/5 but not nerve growth factor (NGF). Involved in the development and/or maintenance of the nervous system. This is a tyrosine-protein kinase receptor. Known substrates for the TRK receptors are SHC1, PI-3 kinase, and PLC-gamma-1. |
| **Tissue specificity** | Isoform TrkB is widely expressed, mainly in the nervous tissue. In the CNS, expression is observed in the cerebral cortex, hippocampus, thalamus, choroid plexus, granular layer of the cerebellum, brain stem, and spinal cord. In the peripheral nervous system, it is expressed in many cranial ganglia, the ophtalmic nerve, the vestibular system, multiple facial structures, the submaxillary glands, and dorsal root ganglia. Isoform TrkB-T1 is expressed in multiple tissues, mainly in brain, pancreas, kidney and heart. Isoform TrkB-T-Shc is predominantly expressed in brain. |
| **Sequence similarities** | Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily.<br>Contains 2 Ig-like C2-type (immunoglobulin-like) domains.<br>Contains 2 LRR (leucine-rich) repeats.<br>Contains 1 LRRCT domain.<br>Contains 1 LRRNT domain.<br>Contains 1 protein kinase domain. |
| **Post-translational modifications** | Ligand-mediated auto-phosphorylation. |
| **Cellular localization** | Membrane. |

## Images



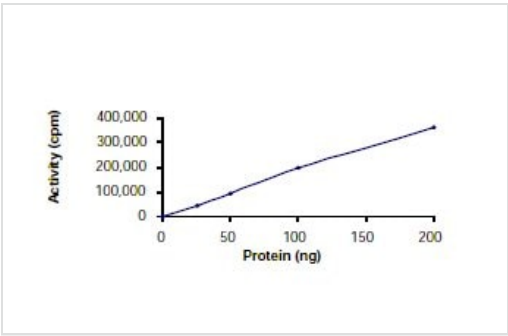

Functional Studies - Recombinant human TrkB protein (ab56652)

The specific activity of TrkB (ab56652) was determined to be 85 nmol/min/mg as per activity assay protocol




SDS-PAGE - Recombinant human TrkB protein (ab56652)

SDS PAGE analysis of ab56652




Functional Studies - Recombinant human TrkB protein (ab56652)

Kinase Assay; Specific Activity 74nmol/min/mg


SDS-PAGE - Recombinant human TrkB protein (ab56652)

SDS Page analysis of ab56652.

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