

# Recombinant human TrkB protein

Catalog Number: ATGP4152

## PRODUCT INFORMATION

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### Expression system

HEK293

### Domain

32-430aa

### UniProt No.

Q16620

### NCBI Accession No.

NP\_001018074.1

### Alternative Names

GP145-TrkB, trk-B, TRKB, NTRK2, OBHD, BDNF/NT-3 growth factors receptor isoform c, BDNF/NT-3 growth factors receptor, Neurotrophic tyrosine kinase receptor type 2, TrkB tyrosine kinase, Tropomyosin-related kinase B

## PRODUCT SPECIFICATION

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### Molecular Weight

70.3kDa (632aa)

### Concentration

1mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

hIgG-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

TrkB/NTRK2, also known as BDNF/NT-3 growth factors receptor, is a 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. Trk family are four

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members ; TrkA, TrkB, TrkC and a related p75NTR receptor. Each family member binds different neurotrophins with varying affinities and TrkB has the highest affinity for BDNF. It plays a role in learning and memory by regulating both short term synaptic function and long-term potentiation. Mutations in TrkB have been associated with obesity and mood disorders. Recombinant human TrkB/NTRK2, fused to hlgG-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

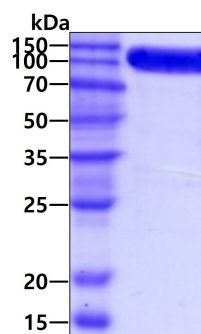
CPTSCKCSAS RIWCSDPSPG IVAFPRLEPN SVDPENITEI FIANQKRLEI INEDDVEAYV GLRNLTIVDS GLKFVAHKAF LKNSNLQHIN FTRNKLTSLR RKHFRHLDLS ELILVGNPFT CSCDIMWIKT LQEAQSSPDT QDLYCLNESS KNIPLANLQI PNCGLPSANL AAPNLTVEEG KSITLSCSVA GDPVPMYWD VGNLVSXHMN ETSHTQGLR ITNISSDDSG KQISCVAENL VGEDQDSVNL TVHFAPTITF LESPTSDHHW CIPFTVKGNP KPALQWFYNG AILNESKYIC TKIHVTNHTE YHGCLQLDNP THMNNGDYTL IAKNEYGKDE KQISAHFMGW PGIDDGANPN YPDVIYEDYG TAANDIGDTT NRSNEIPSTD VTDKTGREH<L EPKSCDKTHT CPPCPAPELL GGPSVFLFPP KPKDTLMISR TPEVTCVVVD VSHEDPEVKF NWYVDGVEVH NAKTKPREEQ YNSTYRVVSV LTVLHQDWLN GKEYKCKVSN KALPAIEKT ISKAKGQPRE PQVYTLPPSR DELTKNQVSL TCLVKGFYPS DIAVEWESNG QPENNYKTP PVLDSGDSFF LYSKLTVDKS RWQQGNVFSC SVMHEALHNNH YTKSLSLSP GK>

## General References

Yeo GS., et al. (2004) Nat Neurosci. 7:1187-1189.  
Banfield MJ., et al. (2001) Structure. 9:1191-1199.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.