# NKMAXBIO We support you, we believe in your research

## Recombinant human TrkB protein

Catalog Number: ATGP4152

## **PRODUCT INFORMATION**

## **Expression system**

**HEK293** 

#### **Domain**

32-430aa

#### UniProt No.

016620

## **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**

## **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

hlgG-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**

## **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



# NKMAXBIO We support you, we believe in your research

## Recombinant human TrkB protein

Catalog Number: ATGP4152

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**

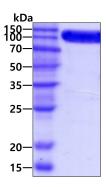
CPTSCKCSAS RIWCSDPSPG IVAFPRLEPN SVDPENITEI FIANQKRLEI INEDDVEAYV GLRNLTIVDS GLKFVAHKAF LKNSNLQHIN FTRNKLTSLS RKHFRHLDLS ELILVGNPFT CSCDIMWIKT LQEAKSSPDT QDLYCLNESS KNIPLANLQI PNCGLPSANL AAPNLTVEEG KSITLSCSVA GDPVPNMYWD VGNLVSKHMN ETSHTQGSLR ITNISSDDSG KQISCVAENL VGEDQDSVNL TVHFAPTITF LESPTSDHHW CIPFTVKGNP KPALQWFYNG AILNESKYIC TKIHVTNHTE YHGCLQLDNP THMNNGDYTL IAKNEYGKDE KQISAHFMGW PGIDDGANPN YPDVIYEDYG TAANDIGDTT NRSNEIPSTD VTDKTGREH<L EPKSCDKTHT CPPCPAPELL GGPSVFLFPP KPKDTLMISR TPEVTCVVVD VSHEDPEVKF NWYVDGVEVH NAKTKPREEQ YNSTYRVVSV LTVLHQDWLN GKEYKCKVSN KALPAPIEKT ISKAKGQPRE PQVYTLPPSR DELTKNQVSL TCLVKGFYPS DIAVEWESNG QPENNYKTTP PVLDSDGSFF LYSKLTVDKS RWQQGNVFSC SVMHEALHNH YTQKSLSLSP 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.

