

**Synonym**

NTRK2,TRKB,GP145-TrkB

**Source**

Human TrkB, His Tag(NT2-H5228) is expressed from human 293 cells (HEK293). It contains AA Cys 32 - His 430 (Accession # [AAH31835](#)).

Predicted N-terminus: Cys 32

**Molecular Characterization**

TrkB(Cys 32 - His 430)  
AAH31835 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 45.2 kDa. The protein migrates as 60-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

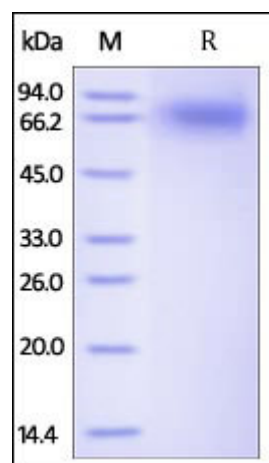
**Storage**

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

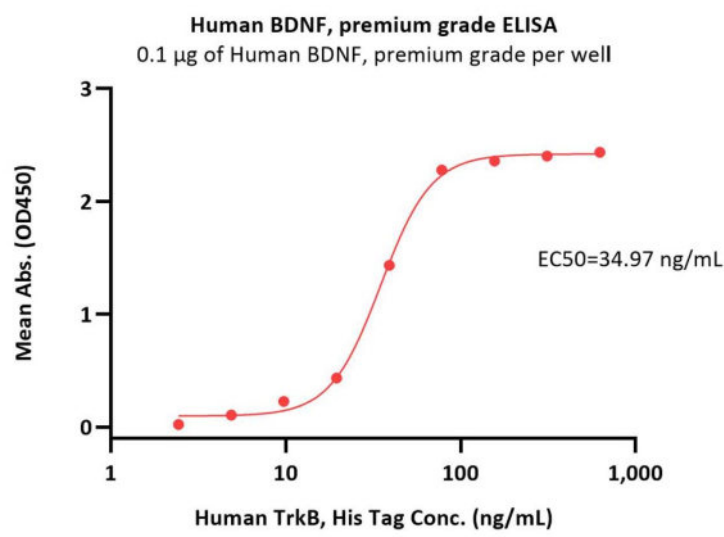
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Human TrkB, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA**



Immobilized Human BDNF, premium grade (Cat. No. BDF-H5219) at 1 µg/mL (100 µL/well) can bind Human TrkB, His Tag (Cat. No. NT2-H5228) with a linear range of 2-78 ng/mL (Routinely tested).

## Background

Neurotrophic tyrosine kinase receptor type 2 (NTRK2) is also known as BDNF/NT-3 growth factors receptor, Tropomyosin-related kinase B (TRKB) and TrkB tyrosine kinase, which belongs to the protein kinase superfamily or Tyr protein kinase family. Insulin receptor subfamily. NTRK2 / TrkB contains two Ig-like C2-type (immunoglobulin-like) domains, two LRR (leucine-rich) repeats, one LRRCT domain, one LRRNT domain, one protein kinase domain. NTRK2 / TrkB is expressed in the central and peripheral nervous system. The catalytic activity of NTRK2 is "ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate". NTRK2 / TrkB 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.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.