

## **Synonym**

Neuropilin-2,NRP2,VEGF165R2,Neuropilin2,Vascular endothelial cell growth factor 165 receptor 2

### Source

Human Neuropilin-2, His Tag(NR2-H52H3) is expressed from human 293 cells (HEK293). It contains AA Arg 21 - Pro 864 (Accession # O60462-1). Predicted N-terminus: Arg 21

### **Molecular Characterization**

NRP2(Arg 21 - Pro 864) O60462-1

Poly-his

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

The protein has a calculated MW of 97.0 kDa. The protein migrates as 105-125 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> 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.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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

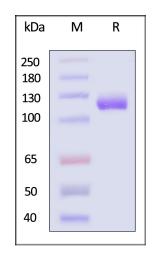
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

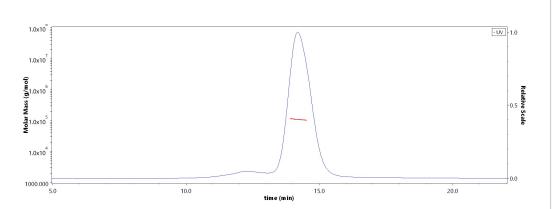
### **SDS-PAGE**



Human Neuropilin-2, 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% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

## **Bioactivity-ELISA**

### **SEC-MALS**



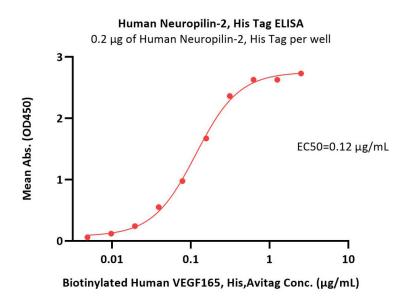
The purity of Human Neuropilin-2, His Tag (Cat. No. NR2-H52H3) is more than 90% and the molecular weight of this protein is around 98-128 kDa verified by SEC-MALS.

Report

# Human Neuropilin-2 / NRP2 Protein, His Tag (MALS verified)







Immobilized Human Neuropilin-2, His Tag (Cat. No. NR2-H52H3) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human VEGF165, His,Avitag (Cat. No. VE5-H82Q0) with a linear range of 0.005-0.625  $\mu$ g/mL (QC tested).

### Background

Neuropilin-1 (Npn-1, previously known as neuropilin) and Neuropilin-2 (previously known as Npn-1-related molecule) are type I transmembrane proteins that bind distinct members of the class III secreted semaphorin subfamily that are implicated in repulsive axon guidance. Neuropilin extracellular domains contain two CUB (complement-binding) domains, two domains with homology to coagulation factors V and VIII, and a MAM (meprin) domain. In the absence of ligands, neuropilins can form homo- and hetero-oligomers via their MAM domains. Expression in developing neurons of the central and peripheral nervous systems is somewhat overlapping but distinct. Npn-1 and Npn-2 are also receptors for VEGF165 on endothelial and tumor cells.

# **Clinical and Translational Updates**

