

Human Neuropilin-1 / NRP1 / CD304 Protein, His Tag (MALS verified)

Catalog # NR1-H5243



Synonyms

NRP1, Neuropilin-1, NRP, VEGF165R, CD304

Source

Human Neuropilin-1 Protein, His Tag (NR1-H5243) is expressed from human 293 cells (HEK293). It contains AA Phe 273 - Thr 427 (Accession # [O14786](#)).

Predicted N-terminus: His

Molecular Characterization

Poly-His

Neuropilin-1 (Phe 273 - Thr 427)
O14786

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

The protein has a calculated MW of 18.9 kDa. The protein migrates as 17-20 kDa and 23-25 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

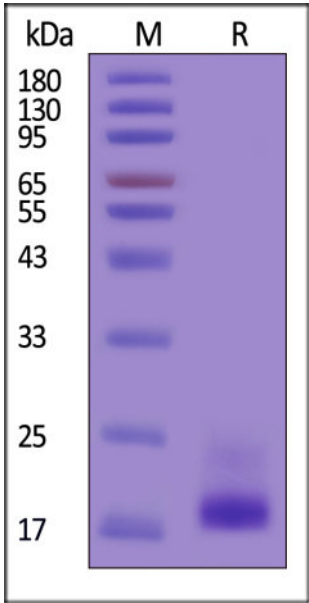
This product is stable after storage at:

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

ACRO Quality Management System

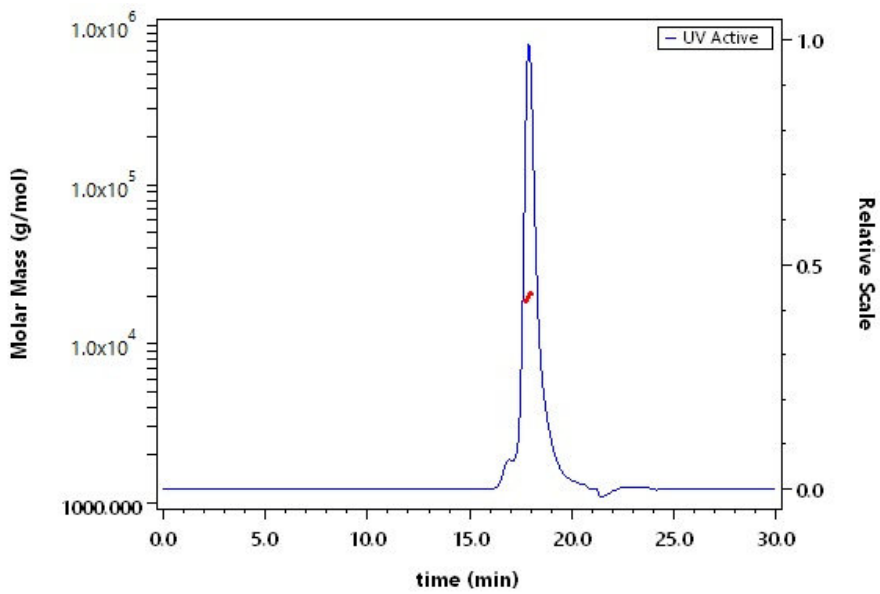
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



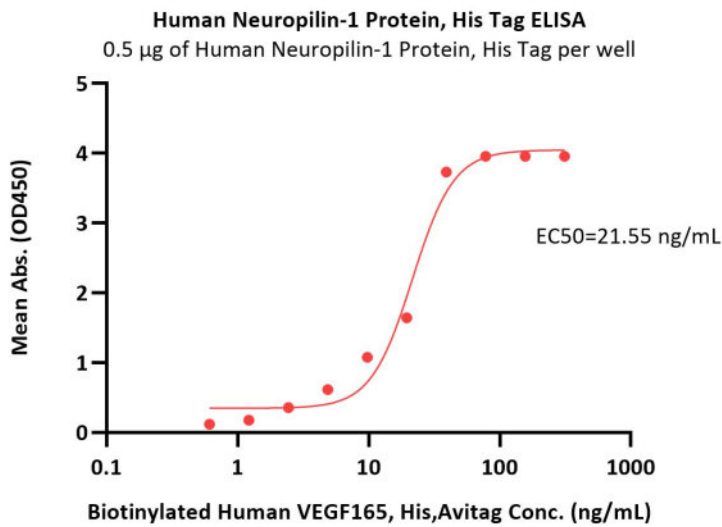
Human Neuropilin-1 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Human Neuropilin-1 Protein, His Tag (Cat. No. NR1-H5243) is more than 90% and the molecular weight of this protein is around 17-27 kDa verified by SEC-MALS.

Activity-ELISA



Immobilized Human Neuropilin-1 Protein, His Tag (Cat. No. NR1-H5243) at 5 µg/mL (100 µL/well) can bind Biotinylated Human VEGF165, His,Avitag (Cat. No. VE5-H82Q0) with a linear range of 0.6-39 ng/mL (QC tested).

Background

Neuropilin-1 (NRP1) is also known as Vascular endothelial cell growth factor 165 receptor (VEGF165R), CD antigen CD304, which belongs to the neuropilin family. The membrane-bound isoform 1 is a receptor involved in the development of the cardiovascular system, in angiogenesis, in the formation of certain neuronal circuits and in organogenesis outside the nervous system. It mediates the chemorepulsant activity of semaphorins. It binds to semaphorin 3A, The PLGF-2 isoform of PGF, The VEGF-165 isoform of VEGF and VEGF-B. Coexpression with KDR results in increased VEGF-165 binding to KDR as well as increased chemotaxis. It may regulate VEGF-induced angiogenesis. The soluble isoform 2 binds VEGF-165 and appears to inhibit its binding to cells.



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