

# Human Neuropilin-1 Protein

Cat. No. NRP-HM101

## Description

<b>Source</b>	Recombinant Human Neuropilin-1 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Phe22-Lys644.
<b>Accession</b>	NP_001019799.1
<b>Molecular Weight</b>	The protein has a predicted MW of 70.97 kDa. Due to glycosylation, the protein migrates to 90-110 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

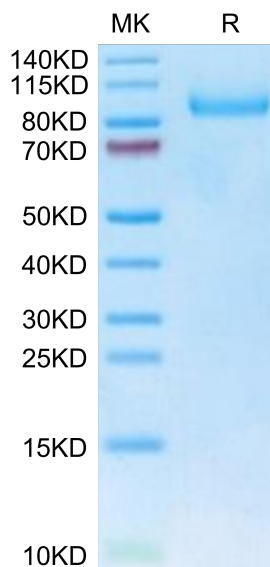
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Neuropilin 1 (NRP1) is a transmembrane glycoprotein that acts as a co-receptor for a number of extracellular ligands including class III/IV semaphorins, certain isoforms of vascular endothelial growth factor and transforming growth factor beta.

## Assay Data

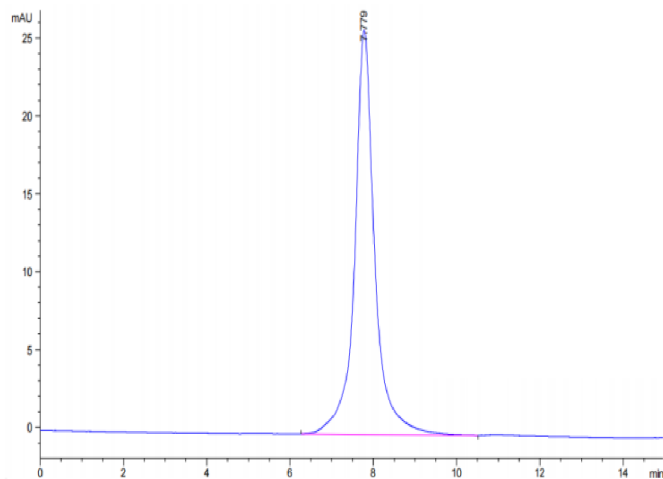
### Bis-Tris PAGE



Human Neuropilin-1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

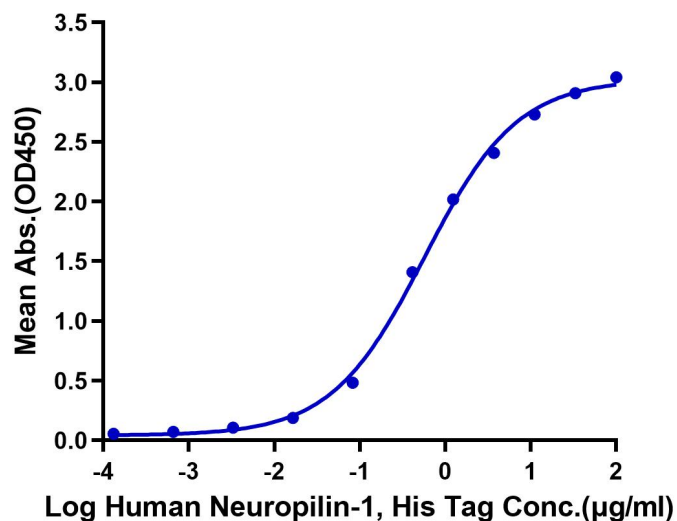


The purity of Human Neuropilin-1 is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human Neuropilin-1, His Tag ELISA

0.5µg Human VEGF165, No Tag Per Well



Immobilized Human VEGF165, No Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human Neuropilin-1, His Tag with the EC50 of 0.57µg/ml determined by ELISA.