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Datasheet for ABIN2181552

Neuropilin 1 Protein (NRP1) (AA 22-644) (His tag)

2 Images

Overview

Quantity:	50 µg
Target:	Neuropilin 1 (NRP1)
Protein Characteristics:	AA 22-644
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Neuropilin 1 protein is labelled with His tag.

Product Details

Sequence:	AA 22-644
Characteristics:	This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 70.7 kDa. The protein migrates as 85-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Purity:	>92 % as determined by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	Neuropilin 1 (NRP1)
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Target Details

Alternative Name: Neuropilin-1 ([NRP1 Products](#))

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.

Molecular Weight: 70.8 kDa

Pathways: [Regulation of Cell Size](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [Smooth Muscle Cell Migration](#), [Platelet-derived growth Factor Receptor Signaling](#), [VEGFR1 Specific Signals](#)

Application Details

Restrictions: For Research Use only

Handling

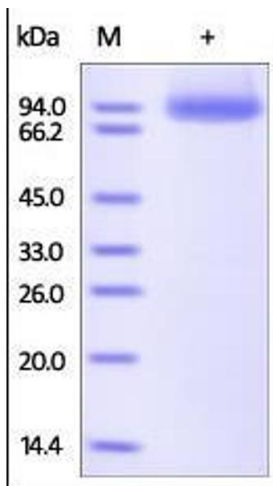
Format: Lyophilized

Buffer: PBS, pH 7.4

Handling Advice: Please avoid repeated freeze-thaw cycles.

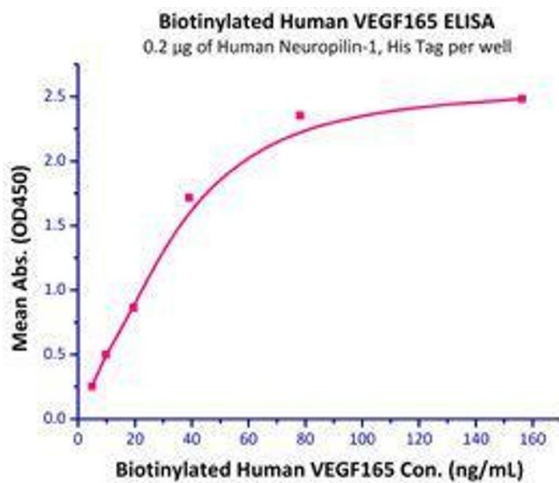
Storage: -20 °C

Storage Comment: No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C), After reconstitution under sterile conditions for 3 months (-70 °C).



SDS-PAGE

Image 1. Human Neuropilin-1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 92%.



Binding Studies

Image 2. Immobilized Human Neuropilin-1, His Tag (Cat # NR1-H5228) at 2 µg/mL (100 µL/well) can bind Biotinylated Human VEGF165 (Cat # VE5-H8210) with a linear range of 5-40 ng/mL.