

Bioactive

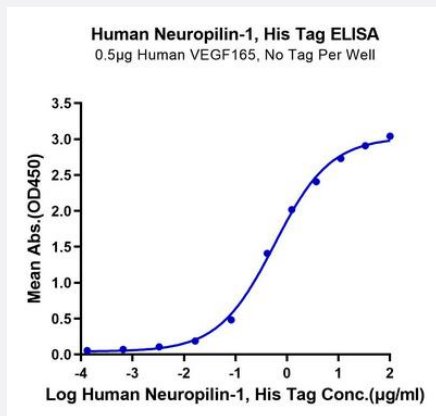
HuPro®

NRP1 (Human) Recombinant Protein

Catalog # P9739

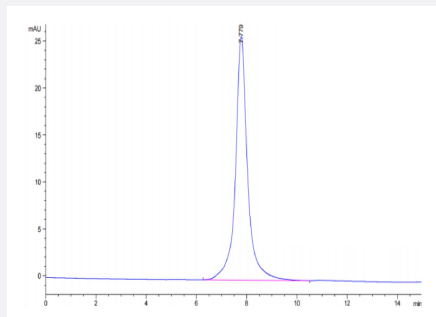
Size 100 ug

Applications



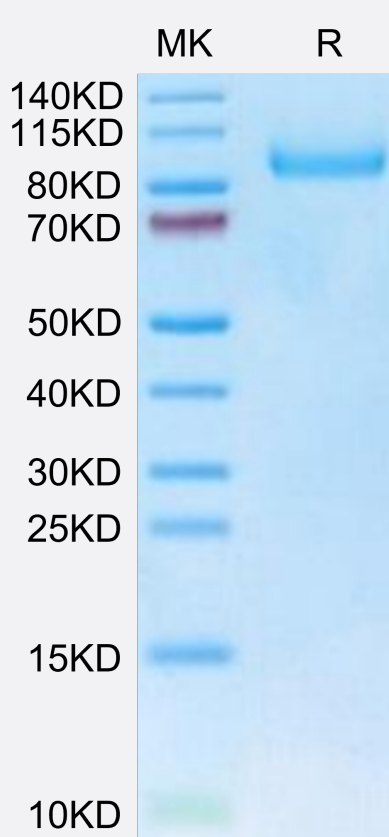
Enzyme-linked Immunoabsorbent Assay

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



SEC-HPLC

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



Tris-Bis PAGE

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

Specification

Product Description

Human NRP1 (NP_001019799.1, 22 a.a. - 644 a.a.) partial recombinant protein with His tag at C-terminus expressed in HEK293 cells.

Sequence

FRNDKCGDTIKIESPGYLTSPGYPHSYHPSEKCEWLIQAPDPYQRIMINFNPHFDLED RDCKYDYV
EVFDGENENGHFRGKFCGKIAPPPVSSGPFLFIKFVSDYETHGAGFSIRYEIFKRGPECSQNYTT
PSGVIKSPGFPEKYPNSLECTYVFAPKMSEIIIEFESFDLEPDSNPPGGMFCRYDRLEWDGFPD
VGPHIGRYCGQKTPGRIRSSSGILSMVFYTD SAIKEGFSANYSVLQSSVSEDFKCMEALGMESG
EIHSDQITASSQYSTNWSAERSRLNYPENGWTPGEDSYREWIQVDLGLLRFTAVGTQGAISKETK
KKYYVKTYKIDVSSNGEDWITKEGNKPVLFQGNTPD VVVAVFPKPLITRFVRIK PATWETGISM R
FEVYGCKITDYPCSGMLGMVSGLISDSQITSSNQGDRNWMPENIRLVT SRSGWALPPAPHSYNE
WLQIDLGEEKIVRGIIQGGKHRENKVFMRKFKIGYSNNGSDWK MIMDDSKRKAKSFEGNNNYDTP
ELRTFPALSTRFIRYPERATHGGLGLRMELLGCEVEAPT AGPTTPNGNLVDECDDDQANCHSGT
GDDFQLTG GTTVLATEKPTVIDSTIQSGIK

Host

Human

Theoretical MW (kDa)

70.97

Form

Lyophilized

Preparation Method

Mammalian cell (Expi293, high-yield transient HEK293) expression system

Purity

> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC

Endotoxin Level	< 1 EU per 1 ug of protein (determined by LAL method)
Activity	The EC ₅₀ was 0.57 ug/mL, measured by ELISA at 5 ug/mL.
Quality Control Testing	SEC-HPLC and Tris-Bis PAGE SEC-HPLC The purity of Human Neuropilin-1 is greater than 95% as determined by SEC-HPLC. Tris-Bis PAGE Human Neuropilin-1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.
Recommend Usage	Biological Activity ELISA SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from sterile distilled Water is > 100 ug/mL
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of bioactivity analysis

Applications

- Enzyme-linked Immunoabsorbent Assay

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

- Functional Study

- SDS-PAGE

Gene Info — NRP1

Entrez GeneID	8829
Protein Accession#	NP_001019799.1
Gene Name	NRP1
Gene Alias	BDCA4, CD304, DKFZp686A03134, DKFZp781F1414, NP1, NRP, VEGF165R
Gene Description	neuropilin 1
Omim ID	602069

Gene Ontology

[Hyperlink](#)

Gene Summary

NRP1 is a membrane-bound coreceptor to a tyrosine kinase receptor for both vascular endothelial growth factor (VEGF; MIM 192240) and semaphorin (see SEMA3A; MIM 603961) family members. NRP1 plays versatile roles in angiogenesis, axon guidance, cell survival, migration, and invasion.[supplied by OMIM]

Other Designations

OTTHUMP00000020818|OTTHUMP00000020820|OTTHUMP00000020821|neuropilin-1|transmembrane receptor

Pathway

- [Axon guidance](#)

Disease

- [Adenocarcinoma](#)
- [Alzheimer Disease](#)
- [Anoxia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Diabetes Mellitus](#)
- [Dominance](#)
- [Esophageal Neoplasms](#)
- [Femur Head Necrosis](#)
- [Genetic Predisposition to Disease](#)
- [Hot Flashes](#)
- [Kidney Failure](#)
- [Lymphatic Metastasis](#)
- [Mental Disorders](#)
- [Neoplasm Invasiveness](#)

- [Neoplasm Recurrence](#)
- [Neovascularization](#)
- [Osteonecrosis](#)
- [Schizophrenia](#)
- [Varicose Ulcer](#)