

# Recombinant human Neuropilin 1 protein ab204616

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### Description

<b>Product name</b>	Recombinant human Neuropilin 1 protein
<b>Biological activity</b>	Measured by its binding ability in a functional ELISA. Immobilized soluble Neuropilin 1 binds all VEGF-A isoforms with the exception of VEGF.
<b>Purity</b>	> 95 % SDS-PAGE. Affinity purified.
<b>Expression system</b>	Insect cells
<b>Accession</b>	<b><u>O14786</u></b>
<b>Protein length</b>	Protein fragment
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	<pre> FRNDKCGDTIKIESPGYLTSPGYPHSYHPSEKCEWLIQAPD PYQRIMINF NP HFDLEDRDCKYDYVEVFDGENENGFHFRGKFCGKIAPPPV VSSGPFL FIKFVS DYETHGAGFSIRYEIFKRGPECSQNYTTSPGVIKSPGFPEK Y PNSLECTYV FAPKMSEIILEFESFDLEPDSNPPGGMFCRYDRLEIWD GFPDVGPHIGRYCG QKTPGRIRSSSGILSMVFYTDSAIAKEGFSANYS VLQSSVSEDFKCMEALGM ESGEIHSQITASSQYSTNWSAERSRLNYP ENGWTPGEDSYREWIQVDLGLL RFVTAVGTQGAISKETKKKYYVKTYK IDVSSNGEDWITIKEGNKPVLFGNT NPTDVVVAVFPKPLITRFVRIK PATWETGISMRFVYVGCKITDYPCSGMLGM VSLISDSQITSSNQGDR NWMPENIRLVTSRSGWALPPAPHSYNEWLQIDL GEEKIVRGIHQGG KHRENKVFMRKFKIGYSNNGSDWKMIMDDSKRKAJSFE GNNNYDTPEL RTFPALSTRFIRIYPERATHGGLGLRMELLGCEVEAPTAGP T TPNGNL </pre>

VDECDDDDQANCHSGTGDDDFQLTGGTTVLATEKPTVIDSTI  
QSGIKL EH HHHHH

<b>Predicted molecular weight</b>	83 kDa including tags
<b>Amino acids</b>	22 to 641
<b>Tags</b>	His tag C-Terminus

## Specifications

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Our **Abpromise guarantee** covers the use of **ab204616** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	SDS-PAGE Functional Studies
<b>Form</b>	Lyophilized

## Preparation and Storage

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<b>Stability and Storage</b>	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. Constituent: 100% PBS This product is an active protein and may elicit a biological response in vivo, handle with caution.
<b>Reconstitution</b>	Reconstitute in water or PBS at a concentration of not lower than 100 µg/ml.

## General Info

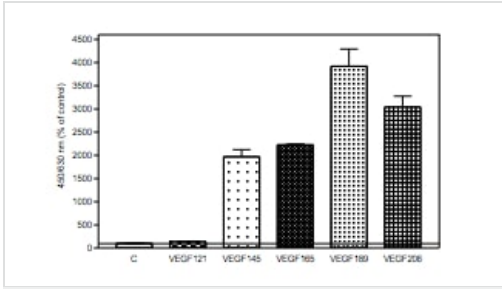
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<b>Function</b>	The membrane-bound isoform 1 is a receptor involved in the development of the cardiovascular system, in angiogenesis, in the formation of certain neuronal circuits and in organogenesis outside the nervous system. It mediates the chemorepulsant 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. It may also induce apoptosis by sequestering VEGF-165. May bind as well various members of the semaphorin family. Its expression has an averse effect on blood vessel number and integrity.
<b>Tissue specificity</b>	The expression of isoforms 1 and 2 does not seem to overlap. Isoform 1 is expressed by the blood vessels of different tissues. In the developing embryo it is found predominantly in the nervous system. In adult tissues, it is highly expressed in heart and placenta; moderately in lung, liver, skeletal muscle, kidney and pancreas; and low in adult brain. Isoform 2 is found in liver hepatocytes, kidney distal and proximal tubules.
<b>Sequence similarities</b>	Belongs to the neuropilin family. Contains 2 CUB domains. Contains 2 F5/8 type C domains. Contains 1 MAM domain.
<b>Cellular localization</b>	Secreted and Cell membrane.

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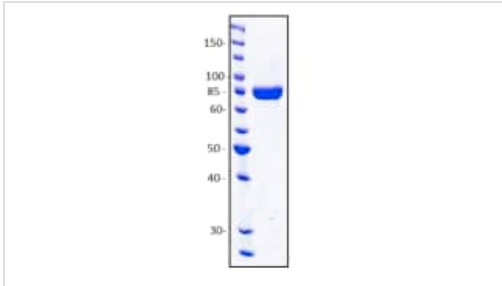
## Images

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ELISA - Recombinant human Neuropilin 1 protein (ab204616)

Functional ELISA showing binding of VEGF-A isoforms to ab204616 at 1 µg/ml (100 µl/well), the ligands were added with 10 ng/ml.



SDS-PAGE - Recombinant human Neuropilin 1 protein (ab204616)

SDS PAGE analysis of ab204616 on 10% SDS PAGE gel under reducing conditions stained with Coomassie blue.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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