

Neuropilin-1 Polyclonal Antibody
Catalog # AP71256**Specification****Neuropilin-1 Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	O14786
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

Neuropilin-1 Polyclonal Antibody - Additional Information**Gene ID** 8829**Other Names**

NRP1; NRP; VEGF165R; Neuropilin-1; Vascular endothelial cell growth factor 165 receptor; CD antigen CD304

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.

IHC-P~~N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Neuropilin-1 Polyclonal Antibody - Protein Information**Name** NRP1 ([HGNC:8004](#))**Synonyms** NRP, VEGF165R**Function**

Cell-surface 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. Mediates the chemorepulsant activity of semaphorins (PubMed:10688880, PubMed:9288753, PubMed:9529250). Recognizes a C-end rule (CendR) motif R/KXXR/K on its ligands which causes cellular internalization and vascular leakage (PubMed:19805273). It binds to semaphorin 3A, the PLGF-2 isoform of PGF, the VEGF165 isoform of VEGFA and VEGFB (PubMed:10688880, PubMed:10688880, PubMed:10688880).

[19805273](http://www.uniprot.org/citations/19805273), PubMed:<[9288753](http://www.uniprot.org/citations/9288753)>, PubMed:<[9529250](http://www.uniprot.org/citations/9529250)>). Coexpression with KDR results in increased VEGF165 binding to KDR as well as increased chemotaxis. Regulates VEGF-induced angiogenesis. Binding to VEGFA initiates a signaling pathway needed for motor neuron axon guidance and cell body migration, including for the caudal migration of facial motor neurons from rhombomere 4 to rhombomere 6 during embryonic development (By similarity). Regulates mitochondrial iron transport via interaction with ABCB8/MITOSUR (PubMed:<[30623799](http://www.uniprot.org/citations/30623799)>).

Cellular Location

[Isoform 2]: Secreted

Tissue Location

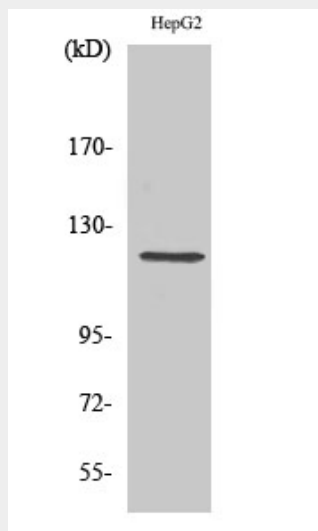
[Isoform 1]: The expression of isoforms 1 and 2 does not seem to overlap. Expressed in olfactory epithelium (at protein level) (PubMed:33082293). Expressed in fibroblasts (at protein level) (PubMed:36213313). Expressed by the blood vessels of different tissues In the developing embryo it is found predominantly 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 (PubMed:10688880, PubMed:9529250). Expressed in the central nervous system, including olfactory related regions such as the olfactory tubercles and paraolfactory gyri (PubMed:33082293)

Neuropilin-1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Neuropilin-1 Polyclonal Antibody - Images



Neuropilin-1 Polyclonal Antibody - Background

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 VEGF165 isoform of VEGFA and VEGFB. Coexpression with KDR results in increased VEGF165 binding to KDR as well as increased chemotaxis. Regulate VEGF-induced angiogenesis. Binding to VEGFA initiates a signaling pathway needed for motor neuron axon guidance and cell body migration, including for the caudal migration of facial motor neurons from rhombomere 4 to rhombomere 6 during embryonic development (By similarity).