

## Anti-NRP1 / Neuropilin 1 Antibody

Rabbit Anti Human Polyclonal Antibody Catalog # ALS18614

### Specification

# Anti-NRP1 / Neuropilin 1 Antibody - Product Information

Application Primary Accession Predicted Host Clonality Isotype Calculated MW WB, IHC-P <u>014786</u> Human, Mouse, Rat Rabbit Polyclonal IgG 103134

### Anti-NRP1 / Neuropilin 1 Antibody - Additional Information

Gene ID 8829

Alias Symbol NRP1 Other Names NRP1, BDCA4, CD304, CD304 antigen, VEGF165 receptor, VEGF165R, Neuropilin 1, Neuropilin-1, Np-1, Npn-1, NRP, NP1, Transmembrane receptor

Target/Specificity Human NRP1 / Neuropilin 1

Reconstitution & Storage Affinity purified

**Precautions** Anti-NRP1 / Neuropilin 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Anti-NRP1 / Neuropilin 1 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:<a

href="http://www.uniprot.org/citations/10688880" target="\_blank">10688880</a>, PubMed:<a href="http://www.uniprot.org/citations/9288753" target="\_blank">9288753</a>, PubMed:<a href="http://www.uniprot.org/citations/9529250" target="\_blank">9529250</a>). Recognizes a C-end rule (CendR) motif R/KXXR/K on its ligands which causes cellular internalization and vascular leakage (PubMed:<a href="http://www.uniprot.org/citations/19805273"



target="\_blank">19805273</a>). It binds to semaphorin 3A, the PLGF-2 isoform of PGF, the VEGF165 isoform of VEGFA and VEGFB (PubMed:<a

href="http://www.uniprot.org/citations/10688880" target="\_blank">10688880</a>, PubMed:<a href="http://www.uniprot.org/citations/19805273" target="\_blank">19805273</a>, PubMed:<a href="http://www.uniprot.org/citations/9288753" target="\_blank">9288753</a>, PubMed:<a href="http://www.uniprot.org/citations/9529250" target="\_blank">9529250</a>). 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:<a href="http://www.uniprot.org/citations/30623799" target="\_blank">30623799</a>).

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)

# Anti-NRP1 / Neuropilin 1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

Anti-NRP1 / Neuropilin 1 Antibody - Images