

Neuropilin 1 Rabbit mAb

Catalog # AP78951

Specification

Neuropilin 1 Rabbit mAb - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, FC, IP, ICC O14786
Human, Mouse, Rat Rabbit
Monoclonal Antibody 103134

Neuropilin 1 Rabbit mAb - Additional Information

Gene ID 8829

Calculated MW

Other Names

NRP1

Dilution

WB~~1/500-1/1000 IHC-P~~N/A FC~~1:10~50 IP~~N/A ICC~~N/A

Format

10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.

Storage

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Neuropilin 1 Rabbit mAb - 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:<a href="http://www.uniprot.org/citations/19805273"

target=" blank">19805273). It binds to semaphorin 3A, the PLGF-2 isoform of PGF, the



VEGF165 isoform of VEGFA and VEGFB (PubMed: 10688880, PubMed:19805273, PubMed:9288753, PubMed: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).

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 Rabbit mAb - Protocols

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

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

Neuropilin 1 Rabbit mAb - Images



