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Anti-Neuropilin 1 Antibody
Rabbit polyclonal antibody to Neuropilin 1
Catalog # AP59758

Specification

Anti-Neuropilin 1 Antibody - Product Information

Application	**WB**
Primary Accession	O14786
Reactivity	**Human, Rat, Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**103134**

Anti-Neuropilin 1 Antibody - Additional Information

Gene ID 8829

Other Names
NRP; VEGF165R; Neuropilin-1; Vascular endothelial cell growth factor 165 receptor; CD304

Target/Specificity
KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Neuropilin 1. The exact sequence is proprietary.

Dilution
WB~~WB (1/500 - 1/1000)

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-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: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: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)

Anti-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
- Flow Cytomety
- Cell Culture

Anti-Neuropilin 1 Antibody - Images

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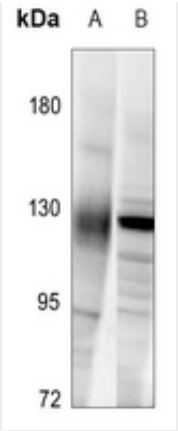

Western blot analysis of Neuropilin 1 expression in mouse brain (A), PC3 (B) whole cell lysates.

Anti-Neuropilin 1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Neuropilin 1. The exact sequence is proprietary.