

Anti-Neuropilin 1 Antibody

Rabbit polyclonal antibody to Neuropilin 1 Catalog # AP59758

Product Information

Application WB Primary Accession 014786

Reactivity Human, Rat, Monkey

HostRabbitClonalityPolyclonalCalculated MW103134

Additional Information

Gene ID 8829

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

receptor; CD304

Target/Specificity Recognizes endogenous levels of Neuropilin 1 protein.

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

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:<u>19805273</u>, PubMed:<u>9288753</u>, PubMed:<u>9529250</u>). 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

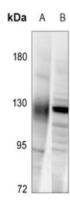
Tissue Location

[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)

Background

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

Images



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

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