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Anti-Neuropilin 1 Antibody

Catalog # AP95980

Product Information

Application	WB, FC
Primary Accession	O14786
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	103134

Additional Information

Gene ID	8829
Other Names	NRP; VEGF165R; Neuropilin-1; Vascular endothelial cell growth factor 165 receptor; CD304
Target/Specificity	Synthesized peptide of human Neuropilin 1
Dilution	WB~~WB (1/500 - 1/1000) FC~~FC (1/100 - 1/200)
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% 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: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).

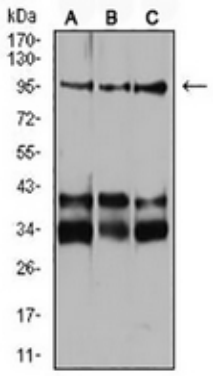
Cellular Location

[Isoform 2]: Secreted Secreted. Note=(Microbial infection) Proteolytically cleaved at the cell membrane upon H.pylori infection.

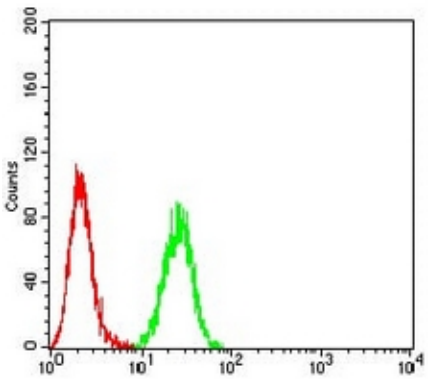
Tissue Location

[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)

Images



Western blot analysis of Neuropilin 1 expression in Jurkat (A), Hela (B), HUVEC (C) whole cell lysates. (Predicted band size: 103 kD; Observed band size: 97 kD)



Flow cytometric analysis of HeLa cells using Anti-Neuropilin 1 Antibody (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.