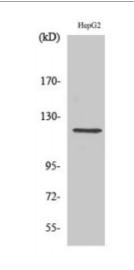
Anti-Neuropilin-1 antibody



Description

Rabbit polyclonal to Neuropilin-1.

Model STJ94438

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IHC, WB

Immunogen Synthesized peptide derived from human Neuropilin-1.

Immunogen Region Internal

Gene ID <u>8829</u>

Gene Symbol NRP1

Dilution range WB 1:500-1:2000IHC 1:100-1:300ELISA 1:5000

Specificity Neuropilin-1 Polyclonal Antibody detects endogenous levels of Neuropilin-1

protein.

Tissue Specificity The expression of isoforms 1 and 2 does not seem to overlap. Isoform 1 is

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. Isoform 2 is found in liver

hepatocytes, kidney distal and proximal tubules.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Neuropilin-1 Vascular endothelial cell growth factor 165 receptor CD antigen

CD304

Molecular Weight 120 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:8004OMIM:602069</u>

Alternative Names Neuropilin-1 Vascular endothelial cell growth factor 165 receptor CD antigen

CD304

Function The membrane-bound isoform 1 is a 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. It mediates the chemorepulsant activity of semaphorins. It binds to semaphorin 3A, The PLGF-2 isoform of PGF, The VEGF165 isoform of VEGFA and VEGFB. Coexpression with KDR results in increased VEGF165 binding to KDR as well as increased chemotaxis. Regulate 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. The soluble isoform 2 binds VEGF-165 and appears to inhibit its binding to cells. It may also induce apoptosis by sequestering VEGF-165. May bind as well various members of the semaphorin family. Its expression

has an averse effect on blood vessel number and integrity.

Sequence and Domain Family The tandem CUB domains mediate binding to semaphorin, while the tandem

F5/8 domains are responsible for heparin and VEGF binding.

Cellular Localization Cell membrane. Single-pass type I membrane protein.. Isoform 2: Secreted.

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