

Neuropilin-1 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10667

Specification

Neuropilin-1 Antibody - Product Information

Application WB **Primary Accession** P97333 Other Accession AAH60129 Mouse, Rat Reactivity Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 103000

Neuropilin-1 Antibody - Additional Information

Gene ID 18186

Application & Usage Western blotting (0.5-4 µg/ml). However,

the optimal concentrations should be determined individually. The antibody recognizes ~100-130 kDa band of Neuropilin 1 in samples from human, mouse and rat, origins. A lower band ~50-70 kDa can also be detected,

presumably to be the cleavage fragment of Neuropilin-1. Reactivity to other species

has not been tested.

Other Names

CD304, DKFZp686A03134, DKFZp781F1414, NRP, NRP1, VEGF165R, neuropilin-1

Target/Specificity

Neuropilin

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

 $100 \mu g$ (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C



Background Descriptions

Precautions

Neuropilin-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Neuropilin-1 Antibody - Protein Information

Name Nrp1 {ECO:0000312|MGI:MGI:106206}

Synonyms Nrp

Function

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 (By similarity). Mediates the chemorepulsant activity of semaphorins (PubMed:26503042). Recognizes a C-end rule (CendR) motif R/KXXR/K on its ligands which causes cellular internalization and vascular leakage (By similarity). Binds to semaphorin 3A (SEMA3A), the PLGF-2 isoform of PGF, the VEGF165 isoform of VEGFA and VEGFB (By similarity). Coexpression with KDR results in increased VEGF165 binding to KDR as well as increased chemotaxis. Regulates VEGF-induced angiogenesis (By similarity). 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 (PubMed:26503042). Regulates mitochondrial iron transport via interaction with ABCB8/MITOSUR (By similarity).

Cellular Location

Mitochondrion membrane {ECO:0000250|UniProtKB:O14786}; Single-pass type I membrane protein. Cell membrane {ECO:0000250|UniProtKB:O14786}; Single- pass type I membrane protein. Cytoplasm {ECO:0000250|UniProtKB:O14786}

Tissue Location

Nervous system.

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

Neuropilin-1 Antibody - Images

Neuropilin-1 Antibody - Background

Neuropilin 1 is a type 1 membrane-bound coreceptor to a tyrosine kinase receptor for both





Vascular Endothelial Growth Factor and Semaphorin family members. Neuropilin 1 is invovled in axon growth and guidance, cell survival, migration, and invasion.