

Summary

Production Name	Neuropilin-1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	NRP1
Alternative Names	NRP1; NRP; VEGF165R; Neuropilin-1; Vascular endothelial cell growth factor 165 receptor; CD antigen CD304
Gene ID	8829.0
SwissProt ID	O14786.The antiserum was produced against synthesized peptide derived from human Neuropilin-1. AA range:476-525

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000..
Molecular Weight	120kD

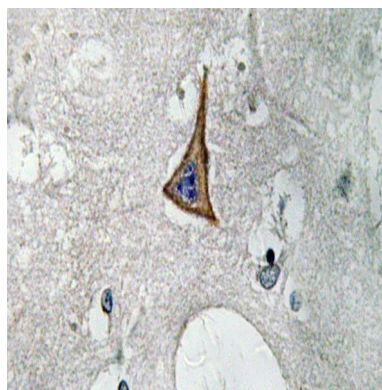
Background

This gene encodes one of two neuropilins, which contain specific protein domains which allow them to participate in several different types of signaling pathways that control cell migration. Neuropilins contain a large N-terminal extracellular domain, made up of complement-binding, coagulation factor V/VIII, and meprin domains. These proteins also contains a short membrane-spanning domain and a small cytoplasmic domain. Neuropilins bind many ligands and various types of co-receptors; they affect cell survival, migration, and attraction. Some of the ligands and co-receptors bound by neuropilins are vascular endothelial growth factor (VEGF) and semaphorin family members. Several alternatively spliced transcript variants that encode different protein isoforms have been described for this gene. [provided by RefSeq, Oct 2011],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 VEGF-165 isoform of VEGF and VEGF-B. Coexpression with KDR results in increased VEGF-165 binding to KDR as well as increased chemotaxis. It may regulate VEGF-induced angiogenesis.,function: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.,similarity:Belongs to the neuropilin family.,similarity:Contains 1 F5/8 type C domain.,similarity:Contains 1 MAM domain.,similarity:Contains 2 CUB domains.,similarity:Contains 2 F5/8 type C domains.,subunit:Heterodimer with NRP2 (Probable). Binds PLXNB1.,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.,

Research Area

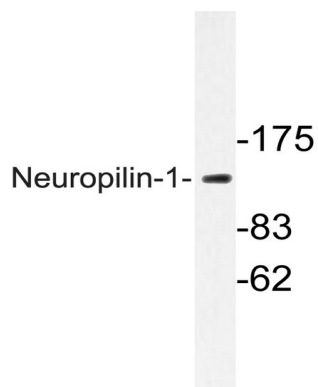
Axon guidance;

Image Data



Immunohistochemistry analysis of Neuropilin-1 antibody in paraffin-embedded human brain tissue.

Product Name: Neuropilin-1 Rabbit Polyclonal Antibody
Catalog #: APRab14620



Western blot analysis of lysate from HepG2 cells, using Neuropilin-1 antibody.



Western Blot analysis of various cells using Neuropilin-1 Polyclonal Antibody

Note

For research use only.