



Rabbit Anti-Neuropilin 1 antibody

SL0693R

Product Name:	Neuropilin 1
Chinese Name:	神经纤毛蛋白1抗体
Alias:	Neuropilin-1; NRP-1; Neuropilin1; BDCA4; CD 304; CD304; DKFZp686A03134; DKFZp781F1414; NEL like protein 1; Nel related protein 1; Neuropilin1; Neuropilin 1; Neuropilin1 transmembrane receptor; NP1; NRP 1; NRP; NRP1; OTTHUMP00000020818; OTTHUMP00000020820; OTTHUMP00000020821; Vascular endothelial cell growth factor 165 receptor; VEGF165R; A5 protein; BLOOD DENDRITIC CELL ANTIGEN 4; NRP1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	103kDa
Cellular localization:	The cell membraneSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human neuropilin-1:851-923/923<Cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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.

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.

Subunit:

Homodimer, and heterodimer with NRP2. Interacts with FER. Binds PLXNB1.

Subcellular Location:

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

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.

Similarity:

Belongs to the neuropilin family.

Contains 2 CUB domains.

Contains 2 F5/8 type C domains.

Contains 1 MAM domain.

SWISS:

O14786

Gene ID:

8829

Database links:

[Entrez Gene: 8829](#) Human

[Entrez Gene: 18186](#) Mouse

[Entrez Gene: 246331](#) Rat

[Omim: 602069](#) Human

[SwissProt: O14786](#) Human

[SwissProt: Q5T7F3](#) Human

[SwissProt: P97333](#) Mouse

[SwissProt: Q6PAR3](#) Mouse

[SwissProt: Q9QWJ9](#) Rat

[Unigene: 131704](#) Human

[Unigene: 653996](#) Human

[Unigene: 271745](#) Mouse

[Unigene: 10815](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

CD304是一种神经元受体, 被认为表达于众多的非造血细胞上, 包括神经元、endothelial

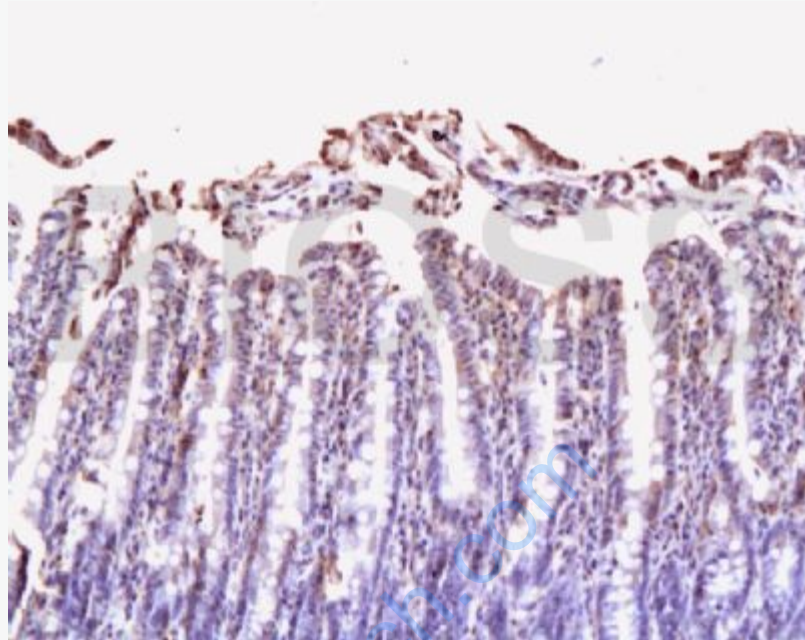
cells和Tumour细胞。在体外单核细胞和造血前体细胞衍生的CD1a+树突状细胞是CD304 (BDCA-4/Neuropilin-1)。

与CD303(BDCA-2)一样, CD304(BDCA-

4)抗原特异性地表达于人血液和骨髓中的浆样树突状细胞。与CD303(BDCA-2)不同的是, CD304(BDCA-

4)在培养的浆样树突状细胞上表达上调, 同时在培养的髓系细胞能被诱导表达。在感染的扁桃体中, CD304(BDCA-

4)不仅表达于浆样树突状细胞, 而且在其它细胞上也能检测到, 如初级滤泡B辅助性记忆T细胞。

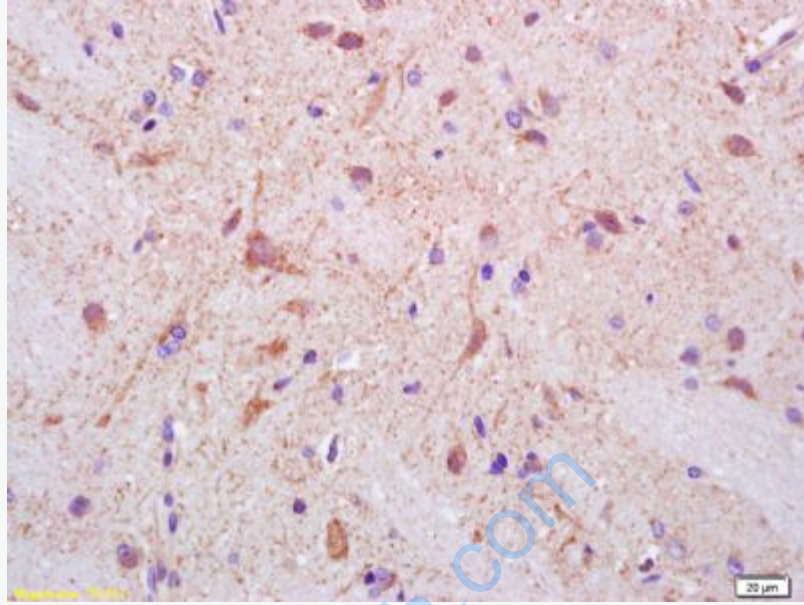


Picture:

Tissue/cell: rat small intestine tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-NRP1/CD304 Polyclonal Antibody, Unconjugated(SL0693R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-NRP1/CD304 Polyclonal Antibody, Unconjugated(SL0693R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining