

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.

Research Area immunology Neurobiology Growth factors and hormones The cell membrane 受体 endothelial cells

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human,Rat (predicted:Mouse,Chicken,Sheep)

Applications WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 103kDa

Cellular localization The cell membrane Secretory protein

Form 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

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.



Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed 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]
Product Detail	<p>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.</p> <p>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.</p> <p>Subunit: Homodimer, and heterodimer with NRP2. Interacts with FER. Binds PLXNB1.</p> <p>Subcellular Location: Cell membrane; Single-pass type I membrane protein. Isoform 2: Secreted.</p> <p>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.</p>

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

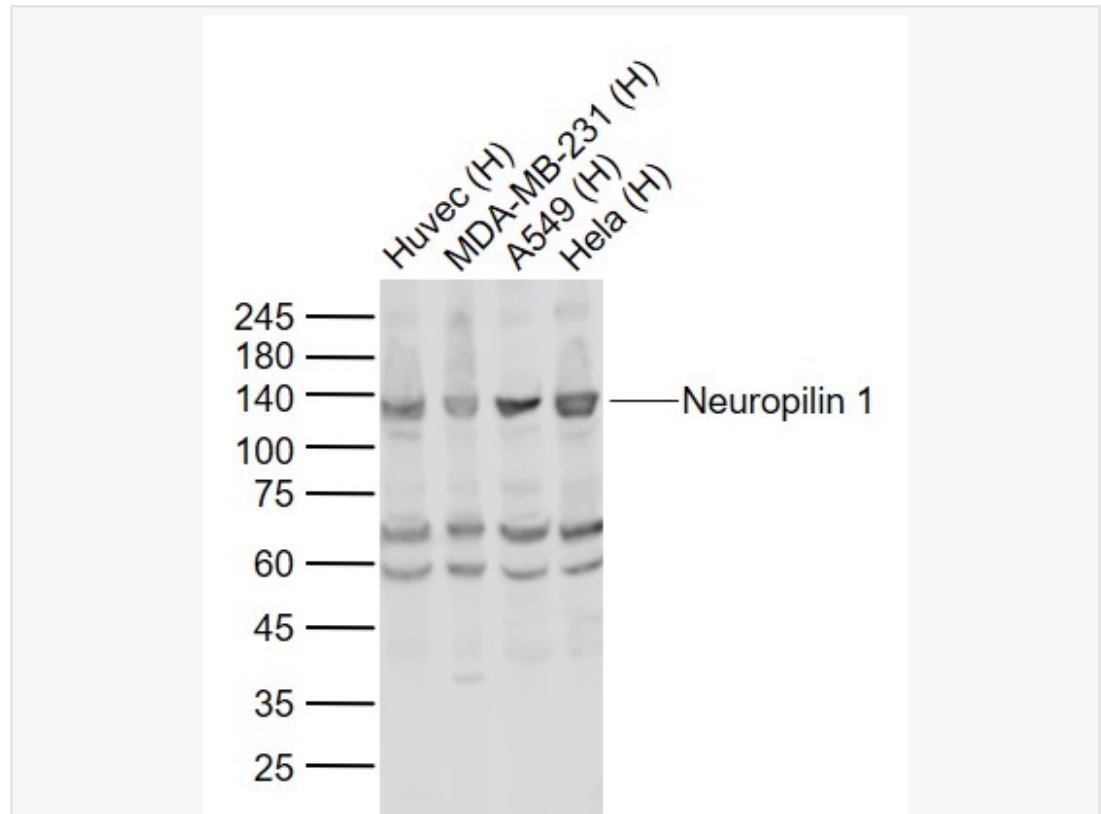
[Unigene: 10815](#) Rat

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。

**Product
Picture**



Sample:

Lane 1: Huvec (Human) Cell Lysate at 30 ug

Lane 2: MDA-MB-231 (Human) Cell Lysate at 30 ug

Lane 3: A549 (Human) Cell Lysate at 30 ug

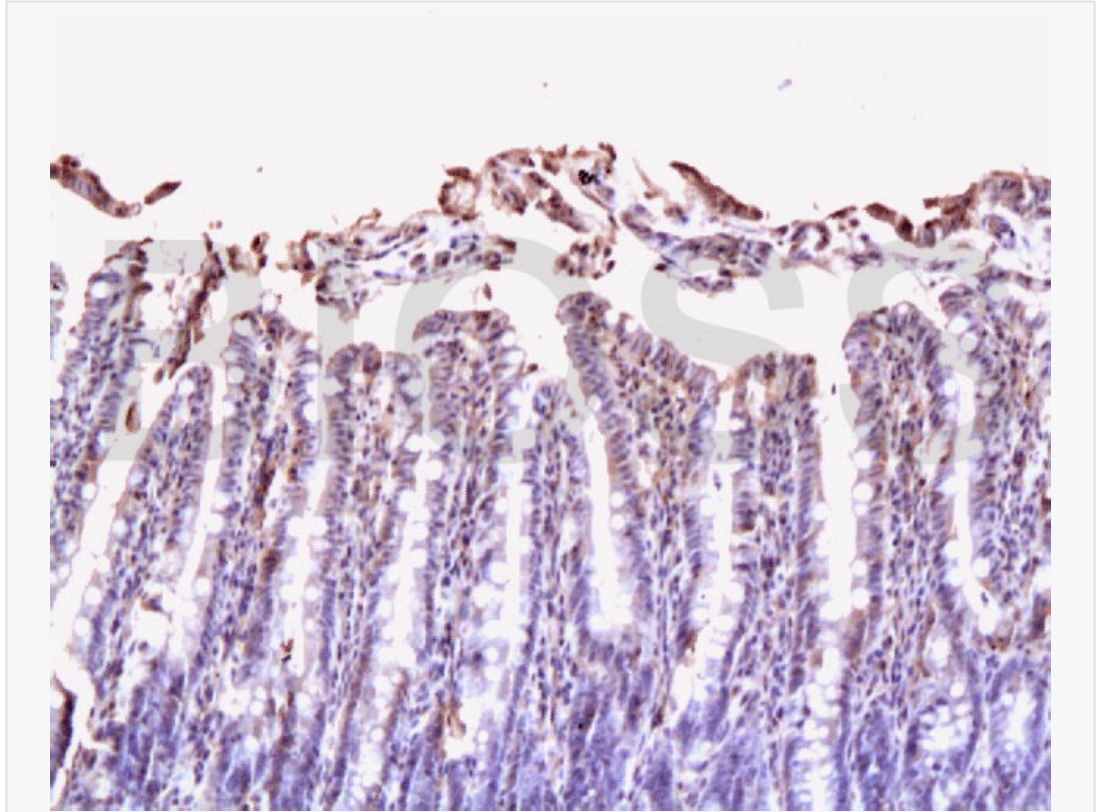
Lane 4: HeLa (Human) Cell Lysate at 30 ug

Primary: Anti-Neuropilin 1 (SL0693R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 103 kD

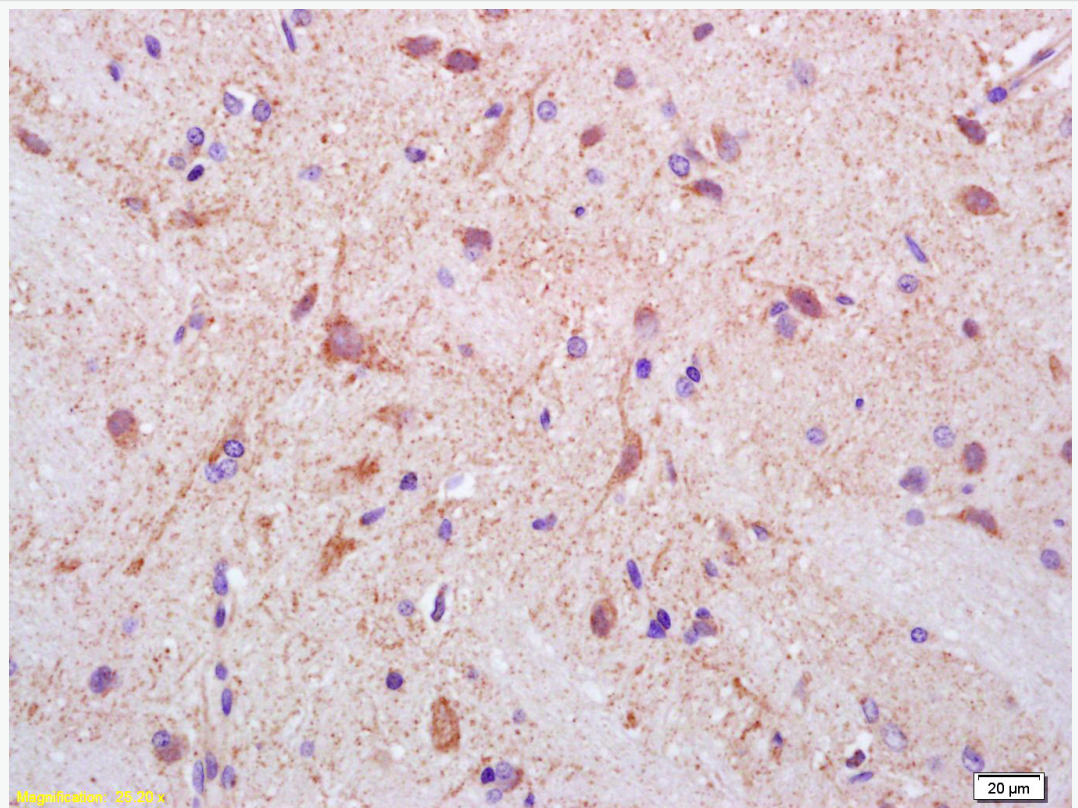
Observed band size: 130 kD



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

Antigen retrieval: citrate buffer (1M, 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 (1M, 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