

neuropilin (H-286): sc-5541

BACKGROUND

Neuropilin is a type I transmembrane receptor that has been implicated in aspects of axon growth and guidance and has been shown to act as a high affinity receptor for class III semaphorins and vascular endothelial growth factor (VEGF). A closely related protein, neuropilin-2, shares a common domain structure and significant homology with neuropilin and also acts as a receptor for the class III semaphorins and VEGF. Both neuropilins are involved in regulating many physiological pathways including axonal guidance and angiogenesis, however they exhibit differential expression in the adult vasculature. Neuropilin-2 is polysialylated and expressed on the surface of dendritic cells. It is also expressed by venous and lymphatic endothelium. Neuropilin is expressed predominantly by arterial endothelium.

CHROMOSOMAL LOCATION

Genetic locus: NRP1 (human) mapping to 10p11.22; Nrp1 (mouse) mapping to 8 E2.

SOURCE

neuropilin (H-286) is a rabbit polyclonal antibody raised against amino acids 570-855 of neuropilin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

neuropilin (H-286) is recommended for detection of neuropilin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

neuropilin (H-286) is also recommended for detection of neuropilin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for neuropilin siRNA (h): sc-36038, neuropilin siRNA (m): sc-36039, neuropilin shRNA Plasmid (h): sc-36038-SH, neuropilin shRNA Plasmid (m): sc-36039-SH, neuropilin shRNA (h) Lentiviral Particles: sc-36038-V and neuropilin shRNA (m) Lentiviral Particles: sc-36039-V.

Molecular Weight of neuropilin: 130 kDa.

Positive Controls: MDA-MB-231 cell lysate: sc-2232, neuropilin (h2): 293T Lysate: sc-177623 or HUV-EC whole cell lysate: sc-364180.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

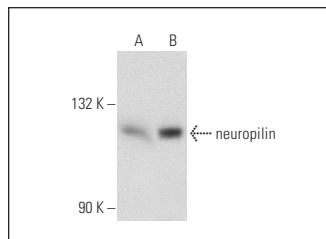
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

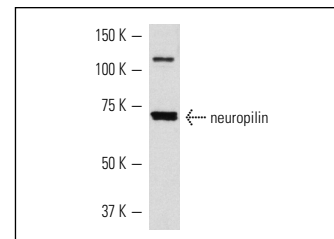
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



neuropilin (H-286): sc-5541. Western blot analysis of neuropilin expression in non-transfected: sc-117752 (A) and human neuropilin transfected: sc-177623 (B) 293T whole cell lysates.



neuropilin (H-286): sc-5541. Western blot analysis of neuropilin expression in MDA-MB-231 whole cell lysates.

SELECT PRODUCT CITATIONS

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- Xu, D., et al. 2008. Novel MMP-9 substrates in cancer cells revealed by a label-free quantitative proteomics approach. *Mol. Cell. Proteomics* 7: 2215-2228.
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- Yamamoto, T., et al. 2010. Clonally expanding thymocytes having lineage capability in gamma-ray-induced mouse atrophic thymus. *Int. J. Radiat. Oncol. Biol. Phys.* 77: 235-243.
- Jin, Q., et al. 2010. Alternate receptor usage of neuropilin-1 and glucose transporter protein 1 by the human T cell leukemia virus type 1. *Virology* 396: 203-212.



Try **neuropilin (A-12): sc-5307**, our highly recommended monoclonal alternative to neuropilin (H-286). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **neuropilin (A-12): sc-5307**.