Anti-Neuropilin 1 Antibody [A3-D1]

M0910-5

Product Type:	Mouse monoclonal IgM, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IF-Cell, IHC-P
Molecular Wt:	Predicted band size: 103 kDa
Clone number:	A3-D1

Description: 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 VEGF165 isoform of VEGFA and VEGFB. Coexpression with KDR results in increased VEGF165 binding to KDR as well as increased chemotaxis. Regulate VEGF-induced angiogenesis. 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.

Immunogen: Recombinant protein with mouse Neuropilin 1 aa 856-923 / 923.

Positive control: Hela, mouse brain tissue, Human kidney tissue, mouse kidney tissue.

Subcellular location: Cell membrane, Cytoplasm, Secreted.

Database links: SwissProt: O14786 Human | P97333 Mouse

Recommended Dilutions:

WB	1:1,000-1:10,000
IF-Cell	1:100-1:500
IHC-P	1:50-1:400

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

Fig1: Western blot analysis on recombinant protein using anti-Neuropilin 1 Mouse mAb (Cat. # M0910-5).

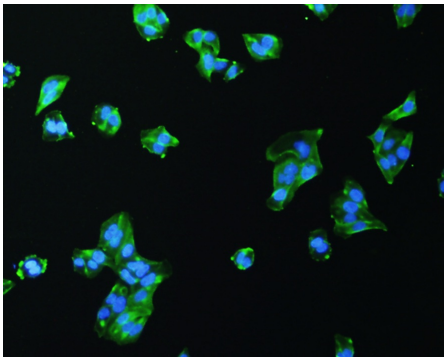

Fig2: Immunofluorescent staining of Hela cells using anti-Neuropilin 1 Mouse mAb (Cat. # M0910-5).

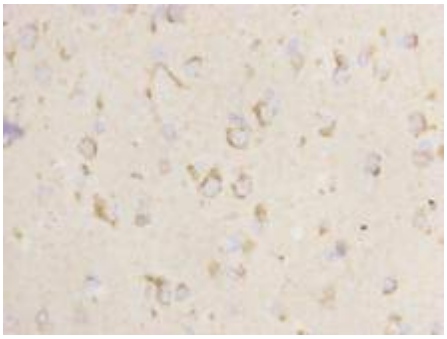

Fig3: Immunohistochemical analysis of paraffin- embedded mouse brain tissue using anti-Neuropilin 1 Mouse mAb (Cat. # M0910-5).

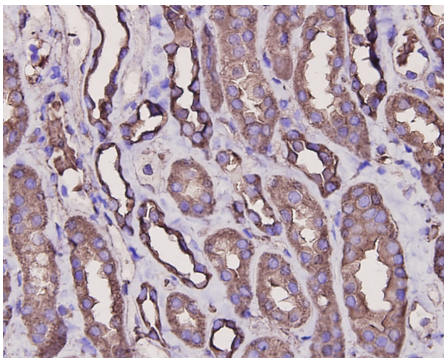

Fig4: Immunohistochemical analysis of paraffin-embedded human kidney tissue with Mouse anti-Neuropilin 1 antibody (M0910-5) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (M0910-5) at 1/400 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

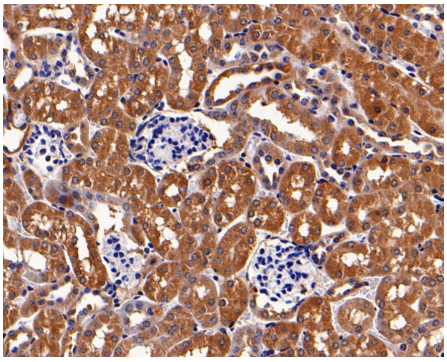

Fig5: Immunohistochemical analysis of paraffin-embedded mouse kidney tissue with Mouse anti-Neuropilin 1 antibody (M0910-5) at 1/400 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (M0910-5) at 1/400 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. "A novel gene encoding a putative transmembrane protein with two extracellular CUB domains and a low-density lipoprotein class A module: isolation of alternatively spliced isoforms in retina and brain."Stoehr H., Berger C., Froehlich S., Weber B.H.F.Gene 286:223-231(2002)
2. "Expression of Btcl2, a novel member of Btcl gene family, during development of the central nervous system." Michishita M., Ikeda T., Nakashiba T., Ogawa M., Tashiro K., Honjo T., Doi K., Itohara S., Endo S.Brain Res. Dev. Brain Res. 153:135-142(2004)