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Anti-Neuropilin-1 (a1 CUB Domain) Antibody

Catalog # AN1857

Product Information

Application	WB, IHC, ICC
Primary Accession	O14786
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	103134

Additional Information

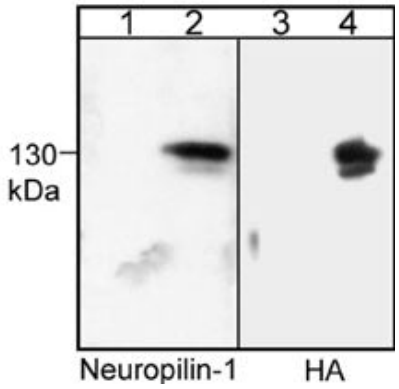
Gene ID	8829
Other Names	NRP1, VEGF 165, VEGFR
Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Neuropilin-1 (a1 CUB Domain) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

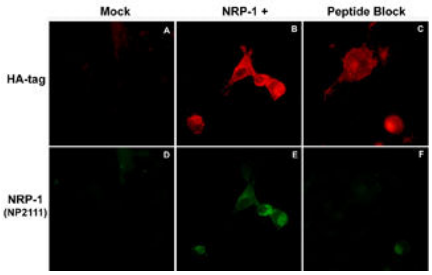
Background

Neuropilins are transmembrane proteins that contain two CUB domains (a1 and a2), two coagulation factor-like domains (b1 and b2), and a MAM domain in the extracellular region. These proteins have short cytoplasmic domains that include a PDZ-binding motif. The neuropilin (NRP) family includes NRP-1, NRP-2A, and NRP-2B. NRP-1 has been implicated as a receptor involved in axon guidance and VEGF signaling. NRP-1 mediates activation of intracellular signaling pathways through interaction with its co-receptors, Plexin-A1 and VEGFRs. The expression of NRP-1, along with the co-receptor Plexin-A1, is upregulated in neurons after central nervous system injury. The axons from these neurons cannot cross semaphorin 3A-containing regions at the site of injury. Thus, semaphorin 3A and its co-receptors, Plexin-A1 and Neuropilin-1, may have significant roles in axon regeneration after neuronal injury.

Images

Western blot image of COS-7 cells untransfected (lanes 1 & 3) or transfected with HA-tagged mouse neuropilin-1 (lanes 2 & 4). Blots were probed with anti-Neuropilin-1 (AN1857) (lanes 1 & 2) or with anti-HA (lanes 3 & 4).





Immunocytochemical double labeling using anti-HA mouse monoclonal and anti-NRP-1 rabbit polyclonal (AN1857) antibodies in COS-7 cells mock transfected (A,D) or transfected with NRP-1 constructs (B,E). The specificity of the binding in E was demonstrated by using NRP-1 peptide (NX2115) in the presence of the anti-NRP-1 antibody (C,F).