

## Anti-Neuropilin-1 (a1 CUB Domain) Antibody

Catalog # AN1856

Specification

### Anti-Neuropilin-1 (a1 CUB Domain) Antibody - Product Information

Application	WB, IHC
Primary Accession	<u>O14786</u>
Reactivity	Bovine
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Calculated MW	103134

### Anti-Neuropilin-1 (a1 CUB Domain) Antibody - Additional Information

Gene ID Other Names NRP1, VEGF 165, VEGFR 8829

**Dilution** WB~~1:1000 IHC~~1:100~500

#### 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

### Anti-Neuropilin-1 (a1 CUB Domain) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Anti-Neuropilin-1 (a1 CUB Domain) Antibody - Images





Western blot image of recombinant human Neuropilin-1 (lanes 1 & 3) and human PC3 cells (lanes 2 & 4). The blots were probed with rabbit polyclonal anti-Neuropilin-1 (NP2111) (lanes 1 & 2) or with mouse monoclonal anti-Neuropilin-1 (lanes 3 & 4).

# Anti-Neuropilin-1 (a1 CUB Domain) Antibody - 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.