

Anti-Plexin A1 (Sema Domain) Antibody
Catalog # AN1913**Specification****Anti-Plexin A1 (Sema Domain) Antibody - Product Information**

Application	WB
Primary Accession	Q9UIW2
Reactivity	Bovine
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	211067

Anti-Plexin A1 (Sema Domain) Antibody - Additional Information

Gene ID	5361
Other Names	
PLXN1, NOV, Sema3A	

Dilution

WB~~1:1000

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-Plexin A1 (Sema Domain) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

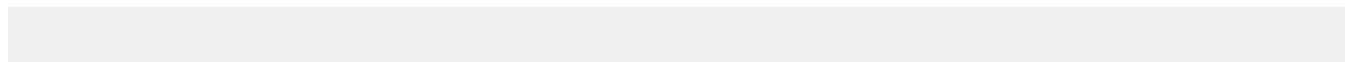
Shipping

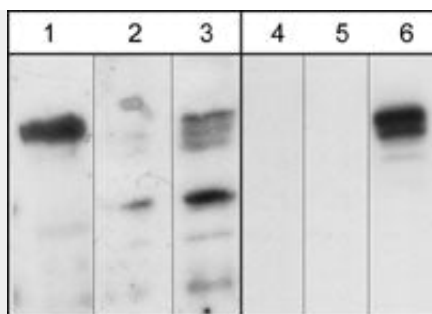
Blue Ice

Anti-Plexin A1 (Sema Domain) Antibody - Protocols

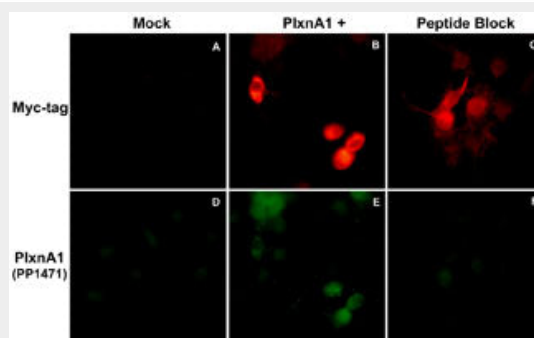
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Plexin A1 (Sema Domain) Antibody - Images



Western blots showing mouse brain (lanes 1 & 4), and Cos-7 cells untransfected (lanes 2 & 5) or transfected with mouse myc-tagged Plexin-A1 (lanes 3 & 6). The blots were probed with either affinity purified anti-Plexin-A1 (PP1471); lanes 1-3) or with mouse monoclonal anti-Myc (lanes 4-6).



Immunocytochemical double labeling using anti-Myc mouse monoclonal and anti-Plexin-A1 rabbit polyclonal (PP1471) antibodies in Cos-7 cells mock transfected (A,D) or transfected with Myc-tagged mouse Plexin-A1 construct (B,E). The specificity of the binding in E was demonstrated by using Plexin-A1 peptide (PX1475) in the presence of this anti-Plexin-A1 antibody (C,F).

Anti-Plexin A1 (Sema Domain) Antibody - Background

Plexins are a family of large integral membrane proteins that complex with neuropilins to form semaphorin co-receptors. The extracellular region of plexins contains a semaphorin domain, multiple glycine-rich motifs, and MET-related sequences. The cytoplasmic region contains a Sex/Plexin domain and putative tyrosine phosphorylation sites that mediate signal transduction after activation. This region in Plexin-A1 binds the RhoGTPases, Rnd1 and RhoD. Recruitment of Rnd1 has been implicated in the cytoskeletal collapse that occurs after semaphorin-mediated activation of Plexin-A1, while RhoD may block this collapsing activity through interaction with the cytoplasmic region of Plexin-A1. The expression of Plexin-A1, along with the co-receptor Neuropilin-1, 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.