

Mouse Plexin A1 Monoclonal Antibody | anti-PLXNA1 antibody

Plexin A1 (Sema Domain) M535 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71689	Mouse	Human, Rat, Mouse	Immunohistochemistry, Immunocytochemistry, Immunoprecipitation, ELISA, Western Blot

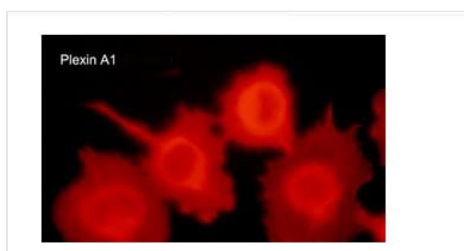
PRODUCT SYNONYMS

Plexin A1; Monoclonal Antibody; Plexin A1 (Sema Domain) M535 Antibody; Plexin A1 (Sema Domain); Plexin A1 mAb; anti-PLXNA1 antibody

PRODUCT SPECIFICATIONS

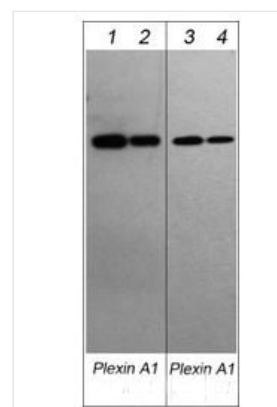
Host	Mouse
Reactivity	Human, Rat, Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Number	M535
Specificity	Clone M535 was affinity purified using Plexin A1 (Sema Domain) peptide (without carrier). The antibody detects a 220kDa* protein corresponding to the apparent molecular mass of Plexin-A1 on SDS-PAGE immunoblots of neonatal mouse brain, and detects a recombinant mouse Plexin A1 protein containing the extracellular region.
Form/Format	Mouse monoclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-PLXNA1 antibody	IHC (Immunohistochemistry), ICC (Immunocytochemistry), IP (Immunoprecipitation), ELISA, WB (Western Blot)
Immunogen	Clone M535 was generated from a Plexin-A1 synthetic peptide (coupled to carrier protein) corresponding to a region within the N-terminal half of the semaphorin domain in human Plexin-A1. This sequence is highly conserved in rat and mouse Plexin-A1, and has low homology to other Plexin family members.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of Plexin A1 in aldehyde fixed and NP-40 permeabilized human NCI-H1299 lung carcinoma cells. The cells were labeled with mouse monoclonal anti-Plexin A1 (PM5351). The antibody was detected using goat anti-mouse DyLight 594.



WB (Western Blot)

Western blots showing mouse recombinant Plexin-A1 extracellular domain (lanes 1-4). These blots were probed with rabbit polyclonal anti-Plexin-A1 (PP1301) at 1:250 (lane 1) and 1:1000 (lane 2) or with mouse monoclonal anti-Plexin A1 (PM5351) at 1:250 (lane 3) and 1:1000 (lane 4).

ADDITIONAL INFORMATION

Related Product Information for anti-PLXNA1 antibody	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.
References	Takahashi, T. & Strittmatter, S.M. (2001) Neuron 29:429. Tamagnone, L. et al. (1999) Cell 99:71. Kolodkin, A.L. et al. (1993) Cell 75:1389.

NCBI AND UNIPROT INFORMATION

NCBI GI #	262118282
NCBI GeneID	5361
NCBI Accession #	NP_115618.3
NCBI GenBank Nucleotide #	NM_032242.3
UniProt Accession #	Q9UIW2
Molecular Weight	211,067 Da
NCBI Official Full Name	plexin-A1
NCBI Official Synonym Full Names	plexin A1
NCBI Official Symbol	PLXNA1
NCBI Official Synonym Symbols	NOV; NOV1; PLXN1; PLEXIN-A1
NCBI Protein Information	plexin-A1; plexin 1; semaphorin receptor NOV
UniProt Protein Name	Plexin-A1
UniProt Gene Name	PLXNA1
UniProt Synonym Gene Names	NOV; PLXN1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.