

Product datasheet for **TA389196**

PLXNA1 Mouse Antibody [Clone ID: M535]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M535
Applications:	ICC, IHC, IP, WB
Recommended Dilution:	WB: 1:500 ICC: 1:100
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
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.
Specificity:	The antibody detects a 220 kDa* 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.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Concentration:	lot specific
Purification:	Antigen Affinity Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	220
Database Link:	Q9UIW2



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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.<

Note:

Protein G purified tissue culture supernatant.