

## Anti-Plexin D1 (Cytoplasmic domain) Antibody

Catalog # AN1915

Specification

### Anti-Plexin D1 (Cytoplasmic domain) Antibody - Product Information

Primary Accession Reactivity Host Clonality Isotype Calculated MW <u>09Y4D7</u> Bovine Rabbit Rabbit Polyclonal IgG 212007

#### Anti-Plexin D1 (Cytoplasmic domain) Antibody - Additional Information

Gene ID Other Names PLXND1, Sema3E 23129

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 D1 (Cytoplasmic domain) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

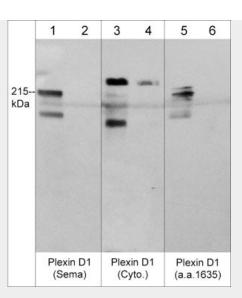
### Anti-Plexin D1 (Cytoplasmic domain) Antibody - Protocols

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

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

Anti-Plexin D1 (Cytoplasmic domain) Antibody - Images





Western blot analysis of Plexin D1 expression in human endothelial cells (HUVEC) (lanes 1-6). The blots were probed with rabbit polyclonals anti-Plexin D1 (Sema domain) (lanes 1 & 2), anti-Plexin D1 (Cytoplasmic domain) (lanes 3 & 4), and anti-Plexin D1 (a.a. 1635-1647) (lanes 5 & 6). Each antibody was used in the presence of their respective blocking peptide (lanes 2, 4 & 6).

### Anti-Plexin D1 (Cytoplasmic 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. Plexin D1 is a type I transmembrane protein that may be expressed as multiple isoforms in many cell types, including neurons and endothelial cells. Semaphorin 3E (Sema-3E) and semaphorin 4A can bind Plexin D1, and ligand binding leads to phosphorylation of Tyr-1642 and activation of Plexin D1. Sema-3E and its receptor are important for angiogenesis that occurs during blood vessel development and repair. In cancers, Sema-3E and Plexin D1 are expressed in tumor tissues and cancer cells, and the interaction of these molecules may promote cancer cell migration and metastic spreading. Thus, Plexin D1, and its ligand Sema-3E, may be important regulators of angiogenesis and metastasis.