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SEMA4D Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21408b

Specification

SEMA4D Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q92854
Reactivity	**Human**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**96150**

SEMA4D Antibody (C-term) - Additional Information

Gene ID 10507

Other Names
Semaphorin-4D, A8, BB18, GR3, CD100, SEMA4D, C9orf164, CD100, SEMAJ

Target/Specificity
This SEMA4D antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 793-832 amino acids from the C-terminal region of human SEMA4D.

Dilution
WB~~1:2000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
SEMA4D Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SEMA4D Antibody (C-term) - Protein Information

Name SEMA4D

Synonyms C9orf164, CD100, SEMAJ

Function Cell surface receptor for PLXNB1 and PLXNB2 that plays an important role in cell-cell

signaling (PubMed:20877282). Regulates GABAergic synapse development (By similarity). Promotes the development of inhibitory synapses in a PLXNB1-dependent manner (By similarity). Modulates the complexity and arborization of developing neurites in hippocampal neurons by activating PLXNB1 and interaction with PLXNB1 mediates activation of RHOA (PubMed:19788569). Promotes the migration of cerebellar granule cells (PubMed:16055703). Plays a role in the immune system; induces B-cells to aggregate and improves their viability (in vitro) (PubMed:8876214). Induces endothelial cell migration through the activation of PTK2B/PYK2, SRC, and the phosphatidylinositol 3-kinase-AKT pathway (PubMed:16055703).

Cellular Location
Cell membrane; Single-pass type I membrane protein

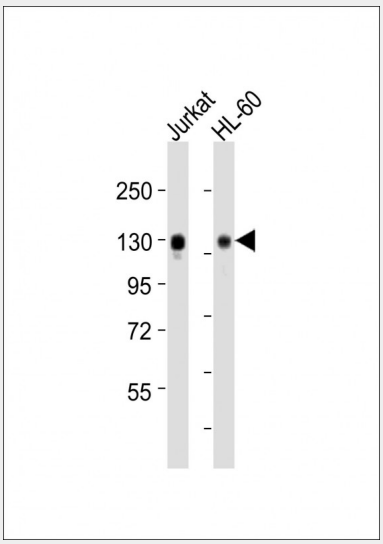
Tissue Location
Strongly expressed in skeletal muscle, peripheral blood lymphocytes, spleen, and thymus and also expressed at lower levels in testes, brain, kidney, small intestine, prostate, heart, placenta, lung and pancreas, but not in colon and liver

SEMA4D Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SEMA4D Antibody (C-term) - Images



All lanes : Anti-SEMA4D Antibody (C-term) at 1:2000 dilution Lane 1: Jurkat whole cell lysates Lane 2: HL-60 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 96 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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SEMA4D Antibody (C-term) - Background

Cell surface receptor for PLXN1B and PLXNB2 that plays an important role in cell-cell signaling. Promotes reorganization of the actin cytoskeleton and plays a role in axonal growth cone guidance in the developing central nervous system. Regulates dendrite and axon branching and morphogenesis. Promotes the migration of cerebellar granule cells and of endothelial cells. Plays a role in the immune system; induces B-cells to aggregate and improves their viability (in vitro). Promotes signaling via SRC and PTK2B/PYK2, which then mediates activation of phosphatidylinositol 3-kinase and of the AKT1 signaling cascade. Interaction with PLXNB1 mediates activation of RHOA.

SEMA4D Antibody (C-term) - References

Hall K.T.,et al.Proc. Natl. Acad. Sci. U.S.A. 93:11780-11785(1996).
Humphray S.J.,et al.Nature 429:369-374(2004).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Tamagnone L.,et al.Cell 99:71-80(1999).
Basile J.R.,et al.Mol. Cell. Biol. 25:6889-6898(2005).