

CD100 Polyclonal Antibody

Catalog # AP73442

Product Information

Application WB
Primary Accession 092854

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW96150

Additional Information

Gene ID 10507

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

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

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,

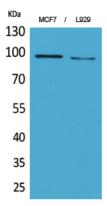
and thymus and also expressed at lower levels in testes, brain, kidney, small

intestine, prostate, heart, placenta, lung and pancreas, but not in colon and liver

Background

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).

Images



Western Blot analysis of MCF7, L929 cells using CD100 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.