

Semaphorin 4D / CD100 Antibody Rabbit mAb Catalog # AP92830

# Specification

# Semaphorin 4D / CD100 Antibody - Product Information

Application WB, IHC, ICC Primary Accession 092854 Clonality Monoclonal Other Names BB18; CD100; COLL4; Collapsin 4; GR3; MSEMA; Sema4d; Semacl2; SemaH; SEMAJ; Semaphorin 4D; Semaphorin H; Semaphorin J; Semcl2;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	<b>96150 Da</b>

### Semaphorin 4D / CD100 Antibody - Additional Information

Dilution

Purification Immunogen

Description

Storage Condition and Buffer

WB~~1:1000
IHC~~1:100~500
ICC~~N/A
Affinity-chromatography
A synthesized peptide derived from human Semaphorin 4D / CD100
May play a functional role in the immune system, as well as in the nervous system.
Induces B-cells to aggregate and improves their viability in vitro.
Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

### Semaphorin 4D / CD100 Antibody - 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:<a href="http://www.uniprot.org/citations/20877282" target="\_blank">20877282</a>). 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:<a

href="http://www.uniprot.org/citations/19788569" target="\_blank">19788569</a>). Promotes the



migration of cerebellar granule cells (PubMed: <a

href="http://www.uniprot.org/citations/16055703" target="\_blank">16055703</a>). Plays a role in the immune system; induces B-cells to aggregate and improves their viability (in vitro) (PubMed:<a href="http://www.uniprot.org/citations/8876214" target="\_blank">8876214</a>). Induces endothelial cell migration through the activation of PTK2B/PYK2, SRC, and the phosphatidylinositol 3-kinase-AKT pathway (PubMed:<a href="http://www.uniprot.org/citations/16055703" target="\_blank">16055703</a>).

**Cellular Location** 

Cell membrane; Single-pass type I membrane protein

#### **Tissue Location**

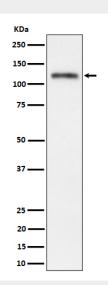
Strongly expressed in skeletal muscle, peripheral blood lymphocytes, spleen, and thymus and also expressed at lower levels in testes, brain, kidney, small intestine, prostate, heart, placenta, lung and pancreas, but not in colon and liver

# Semaphorin 4D / CD100 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>

### Semaphorin 4D / CD100 Antibody - Images



Western blot analysis of Semaphorin 4D / CD100 expression in SH-SY5Y cell lysate.