

A24404

Leader in Biomolecular Solutions for Life Science



# Semaphorin-4D/CD100 Rabbit mAb

Catalog No.: A24404

Recombinant

## Basic Information

### Observed MW

### Calculated MW

82kDa/96kDa

### Category

SMab Recombinant Monoclonal  
Antibody

### Applications

IF/ICC,FC,ELISA

### Cross-Reactivity

Human

### CloneNo number

ARC63157

## Background

Plexin-B1 is related to axon guidance in the central nervous system. The Sema4D function is also widely detected in the immune system and was found to be the first semaphorin expressed on the surface of many types of immune cells. In the immune system, CD72 is a low-affinity receptor for Sema4D, and studies have shown that Sema4D can not only regulate T cell activation, but also participate in the regulation of B cell survival and differentiation. In the immune system, soluble fragments containing extracellular domains produced by proteolytic cleavage can regulate many physiological functions of Sema4D. Sema4D is also associated with tumorigenesis because studies have confirmed that it is overexpressed in various types of solid tumor cells. To some extent, the role of Sema4D in tumorigenesis is related to its ability to cause tumor angiogenesis, cell invasion, and immunosuppression by enhancing bone marrow-derived suppressor cell function.

## Recommended Dilutions

IF/ICC 1:50-1:200

FC 1:50 - 1:200

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

**Gene ID**  
10507**Swiss Prot**  
Q92854

### Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

### Synonyms

SEMA4D; C9orf164; CD100; M-sema-G; SEMAJ; coll-4; semaphorin-4D; Semaphorin-4D/CD100

## Contact

 [www.abclonal.com](http://www.abclonal.com)

## Product Information

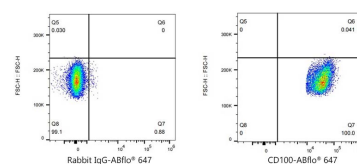
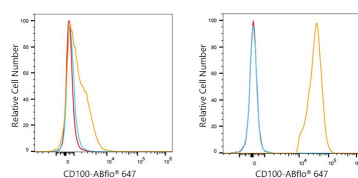
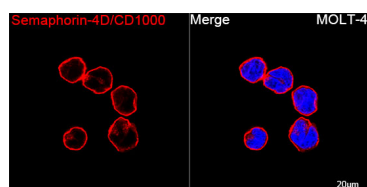
**Source**  
Rabbit**Isotype**  
IgG**Purification**  
Affinity purification

### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

## Validation Data



Confocal imaging of MOLT-4 cells using Semaphorin-4D/CD100 Rabbit mAb (A24404, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.

Flow cytometry:  $1 \times 10^6$  PC-3 cells (Low Expression, left) and MOLT-4 cells (right) were surface-stained with Semaphorin-4D/CD100 Rabbit mAb (A24404,  $2 \mu\text{g}/\text{mL}$ , orange line) or ABflo® 647 Rabbit IgG isotype control (A22070,  $2 \mu\text{g}/\text{mL}$ , blue line), followed by Alexa Fluor® 647 conjugated goat anti-rabbit pAb staining. Non-fluorescently stained cells were used as blank control (red line).

Flow cytometry:  $1 \times 10^6$  MOLT-4 cells were surface-stained with ABflo® 647 Rabbit IgG isotype control (A22070,  $2 \mu\text{g}/\text{mL}$ , left) or Semaphorin-4D/CD100 Rabbit mAb (A24404,  $2 \mu\text{g}/\text{mL}$ , right).