

# ARG23518 anti-Semaphorin 4D antibody [A8] (APC)

Package: 50 tests Store at: 4°C

Summary	
Product Description	APC-conjugated Mouse Monoclonal antibody [A8] recognizes Semaphorin 4D. Mouse anti Human CD100 antibody, clone A8 recognizes human Sepaphorin 4D, also known as CD100, A8, BB18 or GR3. CD100 is a 841 amino acid ~150 kDa homodimeric single pass type 1 transmembrane cell surface glycoprotein actin as a receptor for some members of the plexin family. CD100 is expressed at low levels by peripheral blood T cells, and at higher density on activated T cells and B cells, it is also expresses at high levels in fetal kidney with lower levels in fetal brain, liver and lung (Maestrini et al. 1996).
Tested Reactivity	Hu, R. Mk
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	A8
Isotype	lgG1
Target Name	Semaphorin 4D
Species	Human
Immunogen	Human PHA activated lymphocytes.
Conjugation	APC
Alternate Names	CD100; GR3; CD antigen CD100; M-sema-G; BB18; C9orf164; SEMAJ; Semaphorin-4D; A8; coll-4

## **Application Instructions**

Application table	Application	Dilution
	FACS	Neat
Application Note	FACS: Use 10 $\mu$ l of the suggested working dilution to label 10^6 cells in 100 $\mu$ l. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

## Properties

Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid
Concentration	0.1 mg/ml
Stabilizer	1% BSA and 5% Sucrose
Preservative	0.09% Sodium azide
Buffer	PBS, 0.09% Sodium azide, 1% BSA and 5% Sucrose.
Purification	Purification with Protein G.
Form	Liquid

repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

For laboratory research only, not for drug, diagnostic or other use.

### **Bioinformation**

Note

Gene Symbol	SEMA4D
Gene Full Name	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D
Function	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. [UniProt]
Calculated Mw	96 kDa

### Images



#### ARG23518 anti-Semaphorin 4D antibody [A8] (APC) FACS image

Flow Cytometry: Human peripheral blood lymphocytes stained with ARG23518 anti-Semaphorin 4D antibody [A8] (APC).