Mouse CD36/SR-B3 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2519

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CD36/SR-B3 in ELISAs and Western blots. In sandwich ELISAs, approximately 20% cross-reactivity with recombinant human CD36 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse CD36/SR-B3 Gly30-Lys439 Accession # Q3UAI3
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

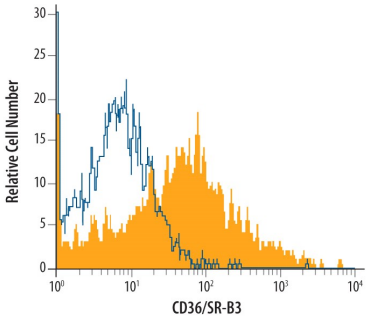
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse CD36/SR-B3 Fc Chimera (Catalog # 2519-CD)
Flow Cytometry	2.5 µg/10^6 cells	See Below
Mouse CD36/SR-B3 Sandwich Immunoassay		**Reagent**
ELISA Capture	0.2-0.8 µg/mL	Mouse CD36/SR-B3 Antibody (Catalog # AF2519)
ELISA Detection	0.1-0.4 µg/mL	Mouse CD36/SR-B3 Biotinylated Antibody (Catalog # BAF2519)
Standard		Recombinant Mouse CD36/SR-B3 Fc Chimera (Catalog # 2519-CD)
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

Flow Cytometry



Detection of CD36/SR-B3 in J774A.1 Mouse Cell Line by Flow Cytometry. J774A.1 mouse reticulum cell sarcoma macrophage cell line was stained with Goat Anti-Mouse CD36/SR-B3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2519, filled histogram) or isotype control antibody (Catalog # AB-108-C, open histogram), followed by Phycoerythrin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0107).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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BACKGROUND

CD36 (alternatively known as platelet membrane glycoprotein IV (GPIV), thrombospondin receptor, fatty acid translocase (FAT), and scavenger receptor class B, member 3 (SR-B3)) is an 88 kDa, integral membrane glycoprotein that belongs to the class B scavenger receptor family (1, 2). The molecule is described as being ditopic, with two transmembrane segments connected by an extracellular loop (3). Mouse CD36 is synthesized as a 472 amino acid (aa) protein that contains a 6 aa N-terminal cytoplasmic domain, a 22 aa N-terminal transmembrane segment, a 420 aa extracellular “loop”, a 22 aa C-terminal transmembrane segment, and a 9 aa C-terminal cytoplasmic tail (4). Both cytoplasmic tails are palmitoylated, with the C-terminal tail involved in oxidized LDL binding (5, 6). With respect to the extracellular loop, the N-terminal region is believed to bind both thrombospondin-1 and Plasmodium-infected erythrocytes. Other ligands for CD36 include long-chain fatty acids, collagen, phospholipids and apoptotic cells (1). The extracellular loop of mouse CD36 is 94%, 92%, 84%, and 84% aa identical to the extracellular loops of rat, hamster, human, and bovine CD36, respectively. Cells known to express CD36 include capillary endothelium, adipocytes, skeletal muscle cells, intestinal epithelium, smooth muscle cells, and hematopoietic cells such as red blood cells, platelets, and monocytes (1). On the surface of cells, CD36 is suggested to exist as a dimer in response to ligation (7). CD36 is reported to regulate fatty uptake, act as an angiogenic with TSP-1, and participate in the clearance of apoptotic phagocytes (1, 8).

References:

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