Mouse CD36/SR-B3
Alexa Fluor® 594-conjugated Antibody

Monoclonal Rat IgG_1 Clone # 324205

Catalog Number: FAB25191T

100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CD36/SR-B3 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human CD36 is observed.
Source	Monoclonal Rat IgG_1 Clone # 324205
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse CD36/SR-B3 Gly30-Lys439 Accession # Q08857
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	0.25-1 µg/10^6 cells	J774A.1 mouse reticulum cell sarcoma macrophage cell line

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

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 shares 94%, 92%, 84% and 84% aa sequence identity with 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 RBC’s, 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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