

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
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*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.

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

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 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).

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