

PRODUCT INFORMATION



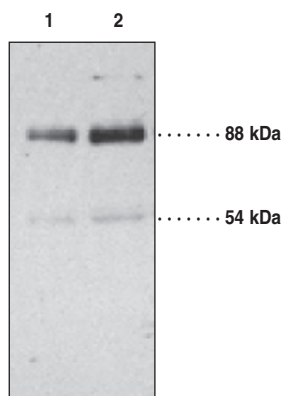
Scavenger Receptor B2/CD36 Polyclonal Antibody

Item No. 100011

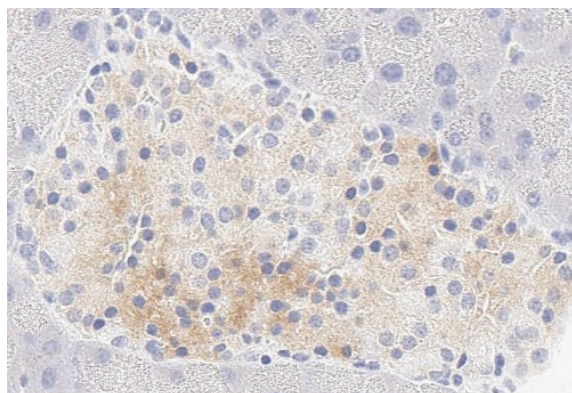
Overview and Properties

Contents:	This vial contains 500 μ l of peptide affinity-purified polyclonal antibody.
Synonyms:	Fatty Acid Translocase, GPIIb, GPIV, Platelet Collagen Receptor, Platelet Glycoprotein 4, PAS IV, Thrombospondin Receptor
Immunogen:	Synthetic peptide from an internal region of human CD36
Cross Reactivity:	(+) CD36
Species Reactivity:	(+) Human, mouse, rat
Uniprot No.:	P16671
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	\geq 3 years
Storage Buffer:	TBS, pH 7.4, with 50% glycerol, 0.1% BSA and 0.02% sodium azide
Host:	Rabbit
Application:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



Lane 1: Human platelet lysate (15 μ g)
Lane 2: Human platelet lysate (30 μ g)



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) mouse small intestine tissue after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with Scavenger Receptor B2/CD36 Polyclonal Antibody (Item No. 100011) at a dilution of 1:200, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

CD36, also known as scavenger receptor B2 or fatty acid translocase, is a transmembrane glycoprotein that has roles in fatty acid uptake and lipid metabolism and signaling.¹ It is composed of N- and C-terminal cytoplasmic tails, two transmembrane domains, and an extracellular loop that binds to a variety of lipid ligands, including long-chain fatty acids, oxidized LDL, and oxidized phospholipids, and protein ligands, such as thrombospondin (TSP-1), and is subject to post-translational modifications.¹⁻³ CD36 is expressed by a variety of cells, including hematopoietic cells such as platelets, monocytes, and macrophages, as well as adipocytes, enterocytes, cardiac and skeletal myocytes, and endothelial and epithelial cells.^{1,4} It also exists as a soluble form, sCD36, which is produced *via* plasma proteases.² CD36 expression is regulated by several transcription factors, including peroxisome proliferator-activated receptor (PPAR), STAT3, and hypoxia-inducible factor-1 α (HIF-1 α), in a tissue-dependent manner.^{1,3} It is localized to the plasma membrane and within endosomes, the endoplasmic reticulum, and mitochondria, and is translocated between these compartments in response to various stimuli, including insulin-induced PI3K signaling and muscle contraction-induced AMPK signaling, to regulate fatty acid uptake.^{2,3} It has additional roles in the phagocytosis of apoptotic cells and *P. falciparum*-infected red blood cells (RBCs), angiogenesis, thrombosis, inflammation, and atherosclerosis, as well as cancer metastasis.^{3,5} Cayman's Scavenger Receptor B2/CD36 Polyclonal Antibody can be used for immunohistochemistry (IHC) and Western blot (WB) applications. As a result of glycosylation, the antibody recognizes CD36 at approximately 88 kDa from human, mouse, and rat samples.

References

1. Glatz, J.F.C. and Luiken, J.J.F.P. Dynamic role of the transmembrane glycoprotein CD36 (SR-B2) in cellular fatty acid uptake and utilization. *J. Lipid Res.* **59(7)**, 1084-1093 (2018).
2. Wang, J. and Li, Y. CD36 tango in cancer: Signaling pathways and functions. *Theranostics* **9(17)**, 4893-4908 (2019).
3. Yang, X., Okamura, D., Lu, X., *et al.* CD36 in chronic kidney disease: Novel insights and therapeutic opportunities. *Nat. Rev. Nephrol.* **13(12)**, 769-781 (2017).
4. Glatz, J.F.C. and Luiken, J.J.F.P. From fat to FAT (CD36/SR-B2). *Biochimie* **136**, 21-26 (2017).
5. Maréchal, L., Laviolette, M., Rodrigue-Way, A., *et al.* The CD36-PPAR γ pathway in metabolic disorders. *Int. J. Mol. Sci.* **19(5)**, 1529 (2017).

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