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Anti-CD36/Sr B3 Rabbit Monoclonal Antibody

Catalog # ABO13444

Product Information

Application	WB, IHC, IP
Primary Accession	P16671
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-CD36/Sr B3 Rabbit Monoclonal Antibody . Tested in WB, IHC, IP applications. This antibody reacts with Human, Mouse, Rat.

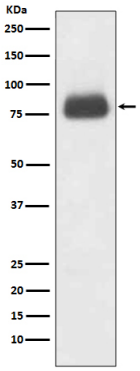
Additional Information

Gene ID	948
Other Names	Platelet glycoprotein 4, Fatty acid translocase, FAT, Glycoprotein IIIb, GPIIIB, Leukocyte differentiation antigen CD36, PAS IV, PAS-4, Platelet collagen receptor, Platelet glycoprotein IV, GPIV, Thrombospondin receptor, CD36, CD36, GP3B, GP4
Calculated MW	53053
Application Details	WB 1:1000-1:2000 IHC 1:50-1:200 IP 1:50
Subcellular Localization	Cell membrane; Multi-pass membrane protein. Upon ligand-binding, internalized through dynamin-dependent endocytosis..
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: GFD-3
Immunogen	A synthesized peptide derived from human CD36
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

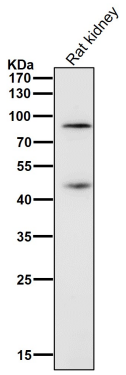
Protein Information

Name	CD36
Synonyms	GP3B, GP4
Function	Multifunctional glycoprotein that acts as a receptor for a broad range of ligands. Ligands can be of proteinaceous nature like thrombospondin, fibronectin, collagen or amyloid-beta as well as of lipidic nature such as oxidized low-density lipoprotein (oxLDL), anionic phospholipids, long- and very long-chain fatty acids and bacterial diacylated lipopeptides. They are generally multivalent and can therefore engage multiple receptors simultaneously, the resulting formation of CD36 clusters initiates signal transduction and internalization of receptor-ligand complexes. The dependency on coreceptor signaling is strongly ligand specific. Cellular responses to these ligands are involved in angiogenesis, inflammatory response, fatty acid metabolism, taste and dietary fat processing in the intestine (Probable). Binds long- and very long-chain fatty acids and facilitates their transport into cells, thus participating in muscle lipid utilization, adipose energy storage, and gut fat absorption (By similarity) (PubMed:18353783, PubMed:21395585, PubMed:21610069). Mechanistically, palmitoylated CD36 captures fatty acids on the cell surface, the binding of fatty acids activates downstream kinase LYN, which phosphorylates the palmitoyltransferase ZDHHC5 and inactivates it, resulting in the subsequent depalmitoylation of CD36, a step needed to initiate the endocytic process and delivery of fatty acids into the cell (PubMed:32958780). In the small intestine, plays a role in proximal absorption of dietary fatty acid and cholesterol for optimal chylomicron formation, possibly through the activation of MAPK1/3 (ERK1/2) signaling pathway (By similarity) (PubMed:18753675). Involved in oral fat perception and preferences (PubMed:22240721, PubMed:25822988). Detection into the tongue of long-chain fatty acids leads to a rapid and sustained rise in flux and protein content of pancreatobiliary secretions (By similarity). In taste receptor cells, mediates the induction of an increase in intracellular calcium levels by long-chain fatty acids, leading to the activation of the gustatory neurons in the nucleus of the solitary tract (By similarity). Important factor in both ventromedial hypothalamus neuronal sensing of long-chain fatty acid and the regulation of energy and glucose homeostasis (By similarity). Receptor for thrombospondins, THBS1 and THBS2, mediating their antiangiogenic effects (By similarity). Involved in inducing apoptosis in podocytes in response to elevated free fatty acids, acting together with THBS1 (By similarity). As a coreceptor for TLR4:TLR6 heterodimer, promotes inflammation in monocytes/macrophages. Upon ligand binding, such as oxLDL or amyloid-beta 42, interacts with the heterodimer TLR4:TLR6, the complex is internalized and triggers inflammatory response, leading to NF-kappa-B-dependent production of CXCL1, CXCL2 and CCL9 cytokines, via MYD88 signaling pathway, and CCL5 cytokine, via TICAM1 signaling pathway, as well as IL1B secretion, through the priming and activation of the NLRP3 inflammasome (By similarity) (PubMed:20037584). Selective and nonredundant sensor of microbial diacylated lipopeptide that signal via TLR2:TLR6 heterodimer, this cluster triggers signaling from the cell surface, leading to the NF-kappa-B-dependent production of TNF, via MYD88 signaling pathway and subsequently is targeted to the Golgi in a lipid-raft dependent pathway (By similarity) (PubMed:16880211).
Cellular Location	Cell membrane; Multi-pass membrane protein. Membrane raft. Golgi apparatus. Apical cell membrane {ECO:0000250|UniProtKB:Q08857}. Note=Upon ligand-binding, internalized through dynamin-dependent endocytosis.

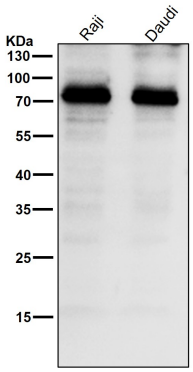
Images



Western blot analysis of CD36 expression in 3T3 cell lysate.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.