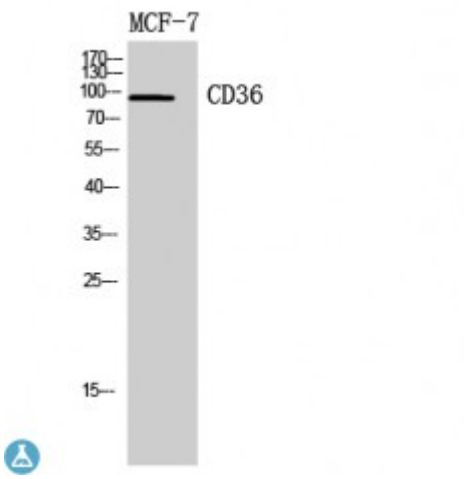
Anti-CD36 antibody



Description	Rabbit polyclonal to CD36.

Model	STJ97280
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human CD36.
Immunogen Region	331-380 aa, Internal
Gene ID	948
Gene Symbol	CD36
Dilution range	WB 1:500-1:2000ELISA 1:10000
Specificity	CD36 Polyclonal Antibody detects endogenous levels of CD36 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	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 Thro
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG

Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1663OMIM:173510
Alternative 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 Thro
Function	Multifunctional glycoprotein that acts as 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-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-chain fatty acids and facilitates their transport into cells, thus participating in muscle lipid utilization, adipose energy storage, and gut fat absorption . 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 . Involved in oral fat perception and preferences . Detection into the tongue of long-chain fatty acids leads to a rapid and sustained rise in flux and protein content of pancreatobiliary secretions . 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 . Important factor in both ventromedial hypothalamus neuronal sensing of long-chain fatty acid and the regulation of energy and glucose homeostasis . Receptor for thombospondins, THBS1 and THBS2, mediating their antiangiogenic effects . 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 . 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 . (Microbial infection) Directly mediates cytoadherence of Plasmodium falciparum parasitized erythrocytes and the internalization of particles independently of TLR signaling.
Cellular Localization	Cell membrane Membrane raft Golgi apparatus Apical cell membrane. Upon ligand-binding, internalized through dynamin-dependent endocytosis.
Post-translational	N-glycosylated and O-glycosylated with a ratio of 2:1. Ubiquitinated at

Modifications	Lys-469 and Lys-472. Ubiquitination is induced by fatty acids such as oleic acid and leads to degradation by the proteasome . Ubiquitination and degradation are inhibited by insulin which blocks the effect of fatty acids .