ARG23025
anti-CD36 antibody [MF3]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rat Monoclonal antibody [MF3] recognizes CD36 Rat anti Mouse CD36 antibody, clone MF3 recognizes mouse CD36, also known as platelet glycoprotein 4, glycoprotein IIIb or PAS IV. CD36 is an ~85 kDa multipass transmembrane glycoprotein primarily expressed on platelets, monocytes/macrophages, smooth muscle and endothelial cells. The CD36 molecule is type B scavenger receptor, which binds to multiple ligands including thrombospondin, anionic phospholipids, oxidized low density lipoproteins and long chain fatty acids. CD36 has diverse functions and is reported to play a role in innate immunity, platelet adhesion/aggregation and long chain fatty acid transport. The CD36 molecule also directly mediates cytoadhesion of erythrocytes infected with Plasmodium falciparum, and may be involved in the development of atherosclerotic lesions and the formation of foam cells.Rat anti Mouse CD36 antibody, clone MF3 has been shown to inhibit IL-4 induced thioglycollate-elicited peritoneal macrophage fusion and significantly block IL-4/GM-CSF-induced bone-marrorw derived macrophage fusion.
Tested Reactivity	Ms
Tested Application	FACS, ICC/IF, IHC-P, IP, WB
Host	Rat
Clonality	Monoclonal
Clone	MF3
Isotype	IgG2a
Target Name	CD36
Species	Mouse
Immunogen	IL-4 treated murine thioglycollate-elicited peritoneal macrophages
Conjugation	Un-conjugated
Alternate Names	GPIV; CHDS7; Platelet glycoprotein 4; CD antigen CD36; PAS-4; PASIV; Glycoprotein IIIb; PAS IV; GPIIIB; FAT; SCARB3; GP3B; Leukocyte differentiation antigen CD36; Platelet collagen receptor; BDPLT10; Thrombospondin receptor; GP4; Fatty acid translocase; Platelet glycoprotein IV

Application Instructions

Application table

Application	Dilution
FACS	Assay-dependent
ICC/IF	Assay-dependent
IHC-P	Assay-dependent
IP	Assay-dependent
WB	Assay-dependent

Application Note

FACS: Use 10 µl of the suggested working dilution to label 10^6 cells in 100 µl.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

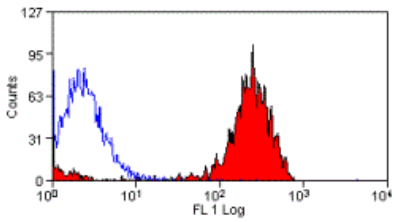
Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	Cd36
Gene Full Name	CD36 antigen
Background	The protein encoded by this gene is the fourth major glycoprotein of the platelet surface and serves as a receptor for thrombospondin in platelets and various cell lines. Since thrombospondins are widely distributed proteins involved in a variety of adhesive processes, this protein may have important functions as a cell adhesion molecule. It binds to collagen, thrombospondin, anionic phospholipids and oxidized LDL. It directly mediates cytoadherence of Plasmodium falciparum parasitized erythrocytes and it binds long chain fatty acids and may function in the transport and/or as a regulator of fatty acid transport. Mutations in this gene cause platelet glycoprotein deficiency. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Feb 2014]
Function	Binds to collagen, thrombospondin, anionic phospholipids and oxidized low-density lipoprotein (oxLDL). May function as a cell adhesion molecule. Directly mediates cytoadherence of Plasmodium falciparum parasitized erythrocytes. Binds long chain fatty acids and may function in the transport and/or as a regulator of fatty acid transport. 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, rapidly induces the formation of a heterodimer of TLR4 and TLR6, which 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. [UniProt]
Calculated Mw	53 kDa
PTM	N-glycosylated and O-glycosylated with a ratio of 2:1. Ubiquitinated at Lys-469 and Lys-472. Ubiquitination is induced by fatty acids such as oleic acid and leads to degradation by the proteasome (PubMed:21610069, PubMed:18353783). Ubiquitination and degradation are inhibited by insulin which blocks the effect of fatty acids (PubMed:18353783).

Images



ARG23025 anti-CD36 antibody [MF3] FACS image

Flow Cytometry: Mouse peripheral blood platelets stained with ARG23025 anti-CD36 antibody [MF3].