ARG53834
anti-CD36 antibody [TR9] (APC)

Package: 100 tests
Store at: 4°C

Summary

Product Description	APC-conjugated Mouse Monoclonal antibody [TR9] recognizes CD36
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The clone TR9 reacts with CD36 (GPIIIb), a 85 kDa integral membrane glycoprotein expressed on platelets, macrophages, endothelial cells, early erythroid cells and megakaryocytes. TR9 cross-blocks binding of FITC-labeled standard antibody OKM5. Anti-CD36 antibodies inhibit adhesive functions (e.g. adherence of infected erythrocytes to target cells).
Host	Mouse
Clonality	Monoclonal
Clone	TR9
Isotype	IgG1
Target Name	CD36
Immunogen	Platelets
Conjugation	APC
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	10 µl / 10^6 cells

Application Note

* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

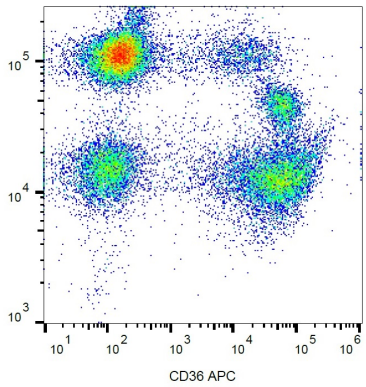
Form	Liquid
Purification Note	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free BSA
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. 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

Database links	GeneID: 948 Human Swiss-port # P16671 Human
Gene Symbol	CD36
Gene Full Name	CD36 molecule (thrombospondin receptor)
Background	CD36 (fatty acid translocase, FAT) is an 88 kDa ditopic glycosylated protein that belongs to the class B family of scavenger receptors. CD36 is expressed by most resting marginal zone B cells but not by follicular and B1 B cells, and it is rapidly induced on Follicular B cells in vitro upon TLR and CD40 stimulation. CD36 does not affect the development of B cells, but modulates both primary and secondary antibody response. Similarly to glucose transporter GLUT4, CD36 is translocated from intracellular pools to the plasma membrane following cell stimulation by insulin. In mouse, CD36 is responsible for gustatory perception of long-chain fatty acids.
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]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Developmental Biology antibody; Immune System antibody; Metabolism antibody; Microbiology and Infectious Disease antibody
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



ARG53834 anti-CD36 antibody [TR9] (APC) FACS image

Flow Cytometry: Human peripheral blood stained with ARG53834 anti-CD36 antibody [TR9] (APC).