Datasheet: MCA2748PE

BATCH NUMBER 164045

Description:	RAT ANTI MOUSE CD36:RPE
Specificity:	CD36
Other names:	GPIV (IIIb)
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	MF3
Isotype:	IgG2a
Quantity:	100 TESTS

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Mouse

Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578
RPE 561nm laser	546	578

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative

0.09% Sodium Azide (NaN_3)

Stabilisers	1% Bovine Serum Albumin 5% Sucrose
Immunogen	IL-4 treated murine thioglycollate-elicited peritoneal macrophages
External Database Links	**UniProt:** Q08857 Related reagents **Entrez Gene:** 12491 Cd36 Related reagents
RRID	AB_2259835
Fusion Partners	Spleen cells from immunised DA rats were fused with cells of the Y3Ag 1.2.3 myeloma cell line
Specificity	**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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10^6 cells in 100ul.
References	1. Helming, L. *et al.* (2009) The scavenger receptor CD36 plays a role in cytokine-induced macrophage fusion. J Cell Sci. 122 (Pt 4): 453-9. 2. Mwaikambo, B.R. *et al.* (2009) Hypoxia up-regulates CD36 expression and function via hypoxia-inducible factor-1- and phosphatidylinositol 3-kinase-dependent mechanisms. J Biol Chem. 284: 26695-707. 3. Yang, C.N. *et al.* (2011) Mechanism mediating oligomeric Aβ clearance by naïve primary microglia. Neurobiol Dis. 42 (3): 221-30. 4. Seeds, R.E. *et al.* (2011) The role of myeloid receptors on murine plasmacytoid dendritic cells in induction of type I interferon. Int Immunopharmacol. 11: 794-801. 5. Samovski, D. *et al.* (2012) Insulin and AMPK regulate FA translocase/CD36 plasma membrane recruitment in cardiomyocytes via Rab GAP AS160 and Rab8a Rab GTPase. J Lipid Res. 53 (4): 709-17. 6. Zhou, D. *et al.* (2012) CD36 level and trafficking are determinants of lipolysis in

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Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA2748PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:RPE (MCA1212PE)

Recommended Useful Reagents

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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