

Datasheet: MCA2748EL

BATCH NUMBER 172994

Description:	RAT ANTI MOUSE CD36:Low Endotoxin
Specificity:	CD36
Other names:	GPIV (IIIb)
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	MF3
Isotype:	IgG2a
Quantity:	0.5 mg

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	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			
Functional Assays	▪			

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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	None present
Carrier Free	Yes
Endotoxin Level	< 0.01 EU/ug
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	IL-4 treated murine thioglycollate-elicited peritoneal macrophages
External Database Links	<p>UniProt: Q08857 Related reagents</p> <p>Entrez Gene: 12491 Cd36 Related reagents</p>
RRID	AB_1604783
Fusion Partners	Spleen cells from immunised DA rats were fused with cells of the Y3Ag 1.2.3 myeloma cell line
Specificity	<p>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.</p> <p>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 <i>Plasmodium falciparum</i>, and may be involved in the development of atherosclerotic lesions and the formation of foam cells.</p> <p>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-marrow derived macrophage fusion.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Mwaikambo, B.R. <i>et al.</i> (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. 2. Seeds, R.E. <i>et al.</i> (2011) The role of myeloid receptors on murine plasmacytoid dendritic cells in induction of type I interferon. Int Immunopharmacol. 11: 794-801. 3. Yang, C.N. <i>et al.</i> (2011) Mechanism mediating oligomeric Aβ clearance by naïve primary microglia. Neurobiol Dis. 42 (3): 221-30.

4. Zhou, D. *et al.* (2012) CD36 level and trafficking are determinants of lipolysis in adipocytes. [FASEB J. 26 \(11\): 4733-42.](#)
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. [Lipid Res. 53 \(4\): 709-17.](#)
6. Dellinger, A. *et al.* (2013) Functionalization of gadolinium metallofullerenes for detecting atherosclerotic plaque lesions by cardiovascular magnetic resonance. [J Cardiovasc Magn Reson. 15: 7.](#)
7. Miyazaki H *et al.* (2014) Fatty acid binding protein 7 regulates phagocytosis and cytokine production in Kupffer cells during liver injury. [Am J Pathol. 184 \(9\): 2505-15.](#)
8. Pugholm, L.H. *et al.* (2015) Enhanced Humoral Responses Induced by Targeting of Antigen to Murine Dendritic Cells. [Scand J Immunol. 82 \(6\): 515-22.](#)
9. Samovski, D. *et al.* (2015) Regulation of AMPK activation by CD36 links fatty acid uptake to β -oxidation. [Diabetes. 64 \(2\): 353-9.](#)
10. Nie, S. *et al.* (2015) Detection of atherosclerotic lesions and intimal macrophages using CD36-targeted nanovesicles. [J Control Release. pii: S0168-3659\(15\)30173-5.](#)
11. Lund, H. *et al.* (2018) Competitive repopulation of an empty microglial niche yields functionally distinct subsets of microglia-like cells. [Nat Commun. 9 \(1\): 4845.](#)
12. Sui, Y. *et al.* (2018) Perinatal Bisphenol A Exposure Increases Atherosclerosis in Adult Male PXR-Humanized Mice. [Endocrinology. 159 \(4\): 1595-608.](#)
13. Zhang, J. *et al.* (2019) Anti-atherogenic effects of CD36-targeted epigallocatechin gallate-loaded nanoparticles. [J Control Release. 303: 263-73.](#)
14. Dhanasekara, C.S. *et al.* (2021) Nanoparticles target intimal macrophages in atherosclerotic lesions. [Nanomedicine. 32: 102346.](#)
15. Liu, J. *et al.* (2022) Pregnane X Receptor Mediates Atherosclerosis Induced by Dicyclohexyl Phthalate in LDL Receptor-Deficient Mice [Cells. 11 \(7\): 1125](#)

Storage	<p>Store at -20°C.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: https://www.bio-rad-antibodies.com/SDS/MCA2748EL
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE

Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Low Endotoxin \(MCA1212EL\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

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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