

Datasheet: MCA2748EL

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| 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.

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| Target Species | Mouse |
| Product Form | Purified IgG - liquid |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G |
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | None present |

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| 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. Helming, L. <i>et al.</i> (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. <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. 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. 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. |

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13. Dellinger, A. *et al.* (2013) Functionalization of gadolinium metallofullerenes for detecting atherosclerotic plaque lesions by cardiovascular magnetic resonance. [J Cardiovasc Magn Reson. 15: 7.](#)
14. Zhang, J. *et al.* (2019) Anti-atherogenic effects of CD36-targeted epigallocatechin gallate-loaded nanoparticles. [J Control Release. 303: 263-73.](#)

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| Storage | Store at -20°C. Storage in frost-free freezers is not recommended. 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. |
| Guarantee | 12 months from date of despatch |
| Health And Safety Information | Material Safety Datasheet documentation #10162 available at: 10162: https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf |
| Regulatory | For research purposes only |

Related Products

Recommended Secondary Antibodies

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| Goat Anti Rat IgG (STAR69...) | FITC |
| Goat Anti Rat IgG (STAR73...) | RPE |
| Rabbit Anti Rat IgG (STAR16...) | DyLight®800 |
| Rabbit Anti Rat IgG (STAR21...) | HRP |
| Rabbit Anti Rat IgG (STAR17...) | FITC |
| Goat Anti Rat IgG (STAR131...) | Alk. Phos., Biotin |
| Goat Anti Rat IgG (STAR72...) | HRP |
| Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) | DyLight®650, DyLight®800 |

Recommended Negative Controls

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

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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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