

Datasheet: MCA2748A700

BATCH NUMBER 172161

Description:	RAT ANTI MOUSE CD36:Alexa Fluor® 700
Specificity:	CD36
Other names:	GPIV (IIIb)
Format:	ALEXA FLUOR® 700
Product Type:	Monoclonal Antibody
Clone:	MF3
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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

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 Alexa Fluor 700 - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Alexa Fluor®700</td> <td>702</td> <td>723</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®700	702	723
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
Alexa Fluor®700	702	723					
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin						
Approx. Protein	IgG concentration 0.05 mg/ml						

Concentrations

Immunogen IL-4 treated murine thioglycollate-elicited peritoneal macrophages

External Database Links

UniProt:

[Q08857](#) [Related reagents](#)

Entrez Gene:

[12491](#) Cd36 [Related reagents](#)

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-marrow derived macrophage fusion.

Flow Cytometry Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul

References

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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 This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2748A700>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 700 \(MCA1212A700\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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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