Datasheet: MCA722F

Description:	MOUSE ANTI HUMAN CD36:FITC
Specificity:	CD36
Other names:	GPIV (IIIb)
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	SMØ
Isotype:	IgM
Quantity:	0.1 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	▪			Neat - 1/10

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species

Human

Product Form

Purified IgM conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgM prepared by ammonium sulphate precipitation from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgM concentration 0.1 mg/ml

Immunogen

Human tonsil cells and peripheral blood mononuclear cells.

External Database Links

UniProt:
P16671 Related reagents

Entrez Gene:

948 CD36 Related reagents

Synonyms	GP3B, GP4
Fusion Partners	Spleen cells from immunised mice were fused with cells of the NSI mouse myeloma line.
Specificity	**Mouse anti Human CD36 antibody, clone SMØ** recognizes the CD36 antigen, an ~88 kDa cell surface glycoprotein expressed by platelets, monocytes/macrophages and also by some microvascular endothelium and erythroid precursors. CD36 is the receptor for thrombospondin. When expressed by monocytes and macrophages, CD36 acts as a receptor for oxidized LDL and for apoptotic polymorphonuclear cells. Mouse anti Human CD36 antibody, clone SMØ partially inhibits collagen induced platelet aggregation and macrophage ingestion of apoptotic human neutrophils. It has been reported that this antibody may activate platelets as measured by fibrinogen binding, P-Selectin expression and Annexin V binding - for further details please contact our Technical Services team. Mouse anti Human CD36 antibody, clone SMØ is also reported to block interaction of oxidised low-density lipoprotein (OXLDL) with CD36 (Sugihara *et al.*1992).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Hogg, N. *et al.* (1984) Monoclonal antibodies specific for human monocytes, granulocytes and endothelium. Immunology. 53 (4): 753-67. 2. Sarigianni, M. *et al.* (2010) Effect of leptin and insulin resistance on properties of human monocytes in lean and obese healthy participants. Angiology. 61: 768-74. 3. Hogg, N. *et al.* (1985) Mononuclear phagocytes of normal and rheumatoid synovial membrane identified by monoclonal antibodies. Immunology. 56 (4): 673-81. 4. Hooper, C. *et al.* (2009) Scavenger receptor control of chromogranin A-induced microglial stress and neurotoxic cascades. FEBS Lett. 583: 3461-6. 5. Endemann, G. *et al.* (1993) CD36 is a receptor for oxidized low density lipoprotein. J Biol Chem. 268 (16): 11811-6. 6. Sugihara, K. *et al.* (1992) Thrombospondin mediates adherence of CD36+ sickle reticulocytes to endothelial cells. Blood. 80 (10): 2634-42. 7. Biswas, A.K. *et al.* (2007) Plasmodium falciparum uses gC1qR/HABP1/p32 as a receptor to bind to vascular endothelium and for platelet-mediated clumping. PLoS Pathog. 3: 1271-80. 8. Pain, A. *et al.* (2001) Platelet-mediated clumping of Plasmodium falciparum-infected erythrocytes is a common adhesive phenotype and is associated with severe malaria. Proc Natl Acad Sci U S A. 98: 1805-10. 9. Urban, B.C. *et al.* (2001) A role for CD36 in the regulation of dendritic cell function. Proc Natl Acad Sci U S A. 98: 8750-5. 10. Diaz-Romero, J. *et al.* (2005) Immunophenotypic analysis of human articular chondrocytes: changes in surface markers associated with cell expansion in monolayer culture. J Cell Physiol. 202: 731-42.
Further Reading	1. Greenwalt, D.E. *et al.* (1992) Membrane glycoprotein CD36: a review of its roles in adherence, signal transduction, and transfusion medicine. Blood. 80 (5): 1105-15.
Storage	Store at +4^{o}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.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgM NEGATIVE CONTROL:FITC (MCA692F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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