

Datasheet: MCA722A647

Description:	MOUSE ANTI HUMAN CD36:Alexa Fluor® 647
Specificity:	CD36
Other names:	GPIV (IIIb)
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	SMØ
Isotype:	IgM
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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			1/5 - 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 Alexa Fluor® 647 - liquid
Preparation	Purified IgM prepared by ammonium sulphate precipitation from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgM concentration 0.05 mg/ml
Immunogen	Human tonsil cells and peripheral blood mononuclear cells.
External Database Links	<p>UniProt: P16671 CD36_HUMAN Related reagents</p> <p>Entrez Gene: 948 CD36 Related reagents</p>
Synonyms	GP3B, GP4
Specificity	<p>MCA722A647 recognises the CD36 antigen, an 88kD cell surface glycoprotein expressed by platelets, monocytes/macrophages and also by some microvascular endothelium and erythroid precursors.</p> <p>CD36 is the receptor for thrombospondin. When expressed by monocytes and macrophages, CD36 acts as a</p>

receptor for oxidized LDL and for apoptotic polymorphonuclear cells. MCA722A647 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.

This clone is also reported to block interaction of oxidised low-density lipoprotein (OXLDL) with CD36 (6). AbD Serotec recommend the use of [MCA722XZ](#) for this purpose.

Flow Cytometry Use 10ul of the suggested working dilution to label 10^6 cells or 100ul whole blood. Method sheets are available on request.

References

1. Hogg, N. *et al.* (1984) Monoclonal antibodies specific for human monocytes, granulocytes and endothelium. [Immunology. 53: 753 - 767.](#)
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. (1985) Mononuclear phagocytes of normal and rheumatoid synovial membrane identified by monoclonal antibodies. [Immunology. 56: 673 - 681.](#)
4. Greenwalt, D. E. *et al.* (1992) Membrane glycoprotein CD36: a review of its roles in adherence, signal transduction and transfusion medicine. [Blood 80: 1105 - 1115.](#)
5. Endemann, G. *et al.* (1993) CD36 is a receptor for oxidized low density lipoprotein. [J. Biol. Chem. 268: 11811 - 11816.](#)
6. Sugihara, K. *et al.* (1992) Thrombospondin mediates adherence of CD36+ sickle reticulocytes to endothelial cells. [Blood 80: 2634 - 2642.](#)
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.](#)
11. Hooper, C. *et al.* (2009) Scavenger receptor control of chromogranin A-induced microglial stress and neurotoxic cascades. [FEBS Lett. 583: 3461-6.](#)

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.

Shelf Life 18 months from date of despatch.

Acknowledgements The Alexa Fluor® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays, and are covered by pending and issued patents.

Health And Safety Information Material Safety Datasheet Documentation #10041 available at: <http://www.abdserotec.com/uploads/MSDS/10041.pdf>

Other formats and applications

This reagent is also available in a [Azide Free](#), [FITC](#), [Purified](#) format and is useful for Immunohistology - Frozen, Functional Assays

For research purposes only, unless otherwise specified in writing by AbD Serotec.



AbD Serotec offices contact details [click here](#)

Address:

MorphoSys UK Ltd, Endeavour House, Langford
Business Park, Langford Lane, Kidlington,
Oxford, OX5 1GE, UK

Tel: +44 (0)1865 852700

Email: tech.uk@abdserotec.com

Web: www.abdserotec.com

Printed on 09 Nov 2011