

Datasheet: MCA722XZ

Description:	MOUSE ANTI HUMAN CD36:Preservative Free
Specificity:	CD36
Other names:	GPIV (IIIb)
Format:	Preservative Free
Product Type:	Monoclonal Antibody
Clone:	SMØ
Isotype:	IgM
Quantity:	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	■			1/25 - 1/50
Immunohistology - Frozen	■			
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation		■		
Western Blotting		■		
Functional Assays	■			

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 - liquid
Preparation	Purified IgM prepared by ammonium sulphate precipitation from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Approx. Protein Concentrations	IgM concentration 1 mg/ml
Immunogen	Human tonsil cells and peripheral blood mononuclear cells.
External Database	UniProt:

Links

[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 10⁶ cells or 100ul whole blood.

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 -20° only.

This product should be stored undiluted.
Avoid repeated freezing and thawing as this may denature the protein.

Storage in frost free freezers is not recommended. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	18 months from date of despatch.
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Health And Safety Information	Material Safety Datasheet documentation #10162 available at: 10162: https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgM (STAR86...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgM (STAR138...) [Alk. Phos.](#)
Human Anti Mouse IgM (HCA040...) [FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgM NEGATIVE CONTROL \(MCA692\)](#)

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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'M289664:160623'

Printed on 21 Jun 2018

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