

Datasheet: MCA594

BATCH NUMBER 159343

Description:	MOUSE ANTI HUMAN CD42a
Specificity:	CD42a
Other names:	GPIX
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	FMC-25
Isotype:	IgG1
Quantity:	0.25 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	▪			1/50 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

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 IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline.
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Peripheral blood mononuclear cells.
External Database Links	<p>UniProt: P14770 Related reagents</p> <p>Entrez Gene: 2815 GP9 Related reagents</p>
RRID	AB_321697
Specificity	<p>Mouse anti Human CD42a antibody, clone FMC-25 recognizes human CD42a, also known as Platelet glycoprotein IX, Glycoprotein 9 or GP-IX. CD42a is a 177 amino acid, ~20kDa type I single pass transmembrane glycoprotein containing a single leucine-rich repeat containing N-terminal domain and a single leucine-rich repeat containing C-terminal domain.</p> <p>CD42a is expressed by platelets and megakaryocytes and forms a covalent complex with CD42c (GP-1b-beta), CD42b (GP-1b-alpha) and CD42d (platelet glycoprotein V) to create the platelet surface receptor for von Willebrand factor. Incubation of the intact von Willebrand receptor complex with clone FMC-25 does not appear to inhibit binding of von Willebrand factor to the receptor (Yan et al. 2011). Defects in the GP1BB gene encoding human CD42a can lead to the inherited bleeding disorder Bernard-Soulier syndrome (Diz-Küçükaya 2013), characterized by prolonged bleeding times, thrombocytopenia and the appearance of giant platelets in the circulation (Johns et al. 2014).</p> <p>Mouse anti human CD42a antibody, clone FMC-25 has been successfully used as a capture reagent for platelet-autoantibody complexes in the sera of patients presenting thrombocytopenia associated with antiphospholipid syndrome (Godeau et al. 1997).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.
Histology Positive Control Tissue	Bone marrow
References	<ol style="list-style-type: none"> Berndt, M.C. <i>et al.</i> (1985) Molecular characterization of quinine/quinidine drug-dependent antibody platelet interaction using monoclonal antibodies. Blood. 66 (6): 1292-301. Berndt, M.C. <i>et al.</i> (1985) Purification and preliminary characterization of the glycoprotein Ib complex in the human platelet membrane. Eur J Biochem. 151 (3): 637-49. Berndt, M.C. <i>et al.</i> (1983) Additional glycoprotein defects in Bernard-Soulier's syndrome: confirmation of genetic basis by parental analysis. Blood. 62 (4): 800-7. San Miguel, J.F. <i>et al.</i> (1985) Characterization of blast cells in chronic granulocytic leukaemia in transformation, acute myelofibrosis and undifferentiated leukaemia. II.

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 13. Meyer, O. *et al.* (2003) Diclofenac-induced antibodies against RBCs and platelets: two case reports and a concise review. [Transfusion. 43: 345-9.](#)
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 15. Ghevaert, C. *et al.* (2008) A nonsynonymous SNP in the ITGB3 gene disrupts the conserved membrane-proximal cytoplasmic salt bridge in the alphaIIb beta3 integrin and cosegregates dominantly with abnormal proplatelet formation and macrothrombocytopenia. [Blood. 111: 3407-14.](#)
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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.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA594 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@550 , DyLight@650 , DyLight@680 , DyLight@800 , FITC , HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M388021:210804'

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