

## Datasheet: MCA594F

<b>Description:</b>	MOUSE ANTI HUMAN CD42a:FITC
<b>Specificity:</b>	CD42a
<b>Other names:</b>	GPIX
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	FMC-25
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 mg

## Product Details

**RRID** AB\_10851215

### 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat
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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525

**Preparation** Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

**Buffer Solution** Phosphate buffered saline

**Preservative** 0.09% Sodium Azide (NaN<sub>3</sub>)  
**Stabilisers** 1% Bovine Serum Albumin

**Approx. Protein Concentrations** IgG concentration 0.1mg/ml

**Immunogen** Peripheral blood mononuclear cells.

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**External Database Links**

**UniProt:**

[P14770](#) [Related reagents](#)

**Entrez Gene:**

[2815](#) GP9 [Related reagents](#)

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**Specificity**

**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](#).

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-Küçükkaya 2013](#)), characterized by prolonged bleeding times, thrombocytopenia and the appearance of giant platelets in the circulation ([Johns et al. 2014](#)).

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](#)).

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**Flow Cytometry**

Use 10ul of the suggested working dilution to label 1 x 10<sup>6</sup> cells in 100ul.

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**Histology Positive Control Tissue**

Bone marrow

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**References**

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17. Bub, C.B. *et al.* (2016) The use of a potential novel tool in virtual crossmatching for platelet transfusion in platelet refractoriness. [Vox Sang. 110 \(1\): 70-8.](#)
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<b>Storage</b>	Store at +4°C or at -20°C if preferred.
	This product should be stored undiluted.
	Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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<b>Guarantee</b>	18 months from date of despatch.
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: 10041: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

'M343860:190111'

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**Printed on 20 May 2019**

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