

Datasheet: MCA1227FT

Description:	MOUSE ANTI HUMAN CD42a:FITC
Specificity:	CD42a
Other names:	GPIX
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	GRP-P
Isotype:	IgG1
Quantity:	25 µg

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

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		
Species Cross Reactivity	Reacts with: Mink, Dog N.B. Antibody reactivity and working conditions may vary between species.		
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 Stabilisers	0.09% Sodium Azide		
	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		
Immunogen	Human red blood cells and platelets.		

**External Database
Links**

UniProt:

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

Entrez Gene:

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

Fusion Partners

Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

Specificity

Mouse anti Human CD42a antibody, clone GRP-P recognizes the platelet GPIX glycoprotein, a 23kDa surface marker expressed by platelets and megakaryocytes. Platelet GPIX is also known as CD42a.

The CD42 complex is the major platelet receptor for von Willebrand factor.

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells or 100ul whole blood

References

1. Sarma, J. *et al.* (2002) Increased platelet binding to circulating monocytes in acute coronary syndromes. [Circulation. 105 \(18\): 2166-71.](#)
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3. Aasted, B. *et al.* (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. [Vet Immunol Immunopathol. 119: 27-37.](#)
4. Perdomo, J. *et al.* (2011) Quinine-induced thrombocytopenia: drug-dependent GPIb/IX antibodies inhibit megakaryocyte and proplatelet production in vitro. [Blood. 117: 5975-86.](#)
5. Harding, S.A. *et al.* (2004) Increased CD40 ligand and platelet-monocyte aggregates in patients with type 1 diabetes mellitus. [Atherosclerosis. 176: 321-5.](#)
6. Harding, S.A. *et al.* (2007) Clopidogrel reduces platelet-leucocyte aggregation, monocyte activation and RANTES secretion in type 2 diabetes mellitus. [Heart. 92: 1335-7.](#)
7. Eisbacher, M. *et al.* (2001) Inducible expression of the megakaryocyte-specific gene glycoprotein IX is mediated through an Ets binding site and involves upstream activation of extracellular signal-regulated kinase. [Cell Growth Differ. 12: 435-45.](#)
8. Vettore, S. *et al.* (2008) Novel point mutation in a leucine-rich repeat of the GPIIb/alpha chain of the platelet von Willebrand factor receptor, GPIIb/IX/V, resulting in an inherited dominant form of Bernard-Soulier syndrome affecting two unrelated families: the N41H variant. [Haematologica. 93: 1743-7.](#)
9. Fox, S.C. *et al.* (2004) Quantitation of platelet aggregation and microaggregate formation in whole blood by flow cytometry. [Platelets. 15: 85-93.](#)
10. Din, J.N. *et al.* (2010) Effect of moderate walnut consumption on lipid profile, arterial stiffness and platelet activation in humans. [Eur J Clin Nutr. 2011 Feb;65\(2\):234-9.](#)
11. Din, J.N. *et al.* (2008) Dietary intervention with oil rich fish reduces platelet-monocyte aggregation in man. [Atherosclerosis. 197: 290-6.](#)
12. Schuberth, H.J. *et al.* (2007) Reactivity of cross-reacting monoclonal antibodies with canine leukocytes, platelets and erythrocytes. [Vet Immunol Immunopathol. 119: 47-55.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	18 months from the date of despatch.
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
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Regulatory	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 \(BUF070B\)](#)

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