

Datasheet: MCA1227A647

BATCH NUMBER 165616

Description:	MOUSE ANTI HUMAN CD42a:Alexa Fluor® 647
Specificity:	CD42a
Other names:	GPIX
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	GRP-P
Isotype:	IgG1
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. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/5

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Mink

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to Alexa Fluor® 647 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

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) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Human red blood cells and platelets.
External Database Links	<p>UniProt: P14770 Related reagents</p> <p>Entrez Gene: 2815 GP9 Related reagents</p>
RRID	AB_324853
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<p>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.</p> <p>The CD42 complex is the major platelet receptor for von Willebrand factor.</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells or 100µl whole blood
References	<ol style="list-style-type: none"> 1. Eisbacher, M. <i>et al.</i> (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. 2. Sarma, J. <i>et al.</i> (2002) Increased platelet binding to circulating monocytes in acute coronary syndromes. Circulation. 105 (18): 2166-71. 3. Fox, S.C. <i>et al.</i> (2004) Quantitation of platelet aggregation and microaggregate formation in whole blood by flow cytometry. Platelets. 15: 85-93. 4. Harding, S.A. <i>et al.</i> (2004) Increased CD40 ligand and platelet-monocyte aggregates in patients with type 1 diabetes mellitus. Atherosclerosis. 176: 321-5. 5. Schuberth, H.J. <i>et al.</i> (2007) Reactivity of cross-reacting monoclonal antibodies with canine leukocytes, platelets and erythrocytes. Vet Immunol Immunopathol. 119: 47-55. 6. Harding, S.A. <i>et al.</i> (2007) Clopidogrel reduces platelet-leucocyte aggregation, monocyte activation and RANTES secretion in type 2 diabetes mellitus. Heart. 92: 1335-7. 7. Aasted, B. <i>et al.</i> (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. Vet Immunol Immunopathol. 119: 27-37. 8. Din, J.N. <i>et al.</i> (2008) Dietary intervention with oil rich fish reduces platelet-monocyte aggregation in man. Atherosclerosis. 197: 290-6. 9. Vettore, S. <i>et al.</i> (2008) Novel point mutation in a leucine-rich repeat of the GPIIb/IIIa

chain of the platelet von Willebrand factor receptor, GPIb/IX/V, resulting in an inherited dominant form of Bernard-Soulier syndrome affecting two unrelated families: the N41H variant. [Haematologica. 93: 1743-7.](#)

10. Bournazos, S. *et al.* (2008) Monocyte functional responsiveness after PSGL-1-mediated platelet adhesion is dependent on platelet activation status. [Arterioscler Thromb Vasc Biol. 28: 1491-8.](#)

11. 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.](#)

12. Perdomo, J. *et al.* (2011) Quinine-induced thrombocytopenia: drug-dependent GPIb/IX antibodies inhibit megakaryocyte and proplatelet production *in vitro*. [Blood. 117: 5975-86.](#)

13. Jamaly, S. *et al.* (2018) Elevated plasma levels of P-selectin glycoprotein ligand-1-positive microvesicles in patients with unprovoked venous thromboembolism. [J Thromb Haemost. May 31 \[Epub ahead of print\].](#)

14. Tunströmer, K. *et al.* (2018) Quantification of Platelet Contractile Movements during Thrombus Formation. [Thromb Haemost. 118 \(9\): 1600-11.](#)

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. This product is photosensitive and should be protected from light.

Guarantee 12 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: <https://www.bio-rad-antibodies.com/SDS/MCA1227A647>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Recommended Useful Reagents

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

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

North & South Tel: +1 800 265 7376

America 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M418994:230509'

Printed on 19 Jan 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)