

Datasheet: MCA1227A647T

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:	25 TESTS/0.25ml

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_2263687
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, GPIIb/IIIa, 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 GPIIb/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.
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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
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1227A647T 10041
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

HUMAN SEROBLOCK (BUF070B)

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