

Datasheet: MCA1227PE

BATCH NUMBER 173118

Description:	MOUSE ANTI HUMAN CD42a:RPE
Specificity:	CD42a
Other names:	GPIX
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	GRP-P
Isotype:	IgG1
Quantity:	100 TESTS

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 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 R. Phycoerythrin (RPE) - lyophilized								
Reconstitution	Reconstitute with 1 ml distilled water								
Max Ex/Em	<table><tr><th>Fluorophore</th><th>Excitation Max (nm)</th><th>Emission Max (nm)</th></tr><tr><td>RPE 488nm laser</td><td>496</td><td>578</td></tr></table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578		
Fluorophore	Excitation Max (nm)	Emission Max (nm)							
RPE 488nm laser	496	578							
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 5% sucrose
Immunogen	Human red blood cells and platelets.
External Database Links	UniProt: P14770 Related reagents Entrez Gene: 2815 GP9 Related reagents
RRID	AB_321699
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 10µl of the suggested working dilution to label 10 ⁶ cells or 100µl whole blood
References	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. Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1227PE
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

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

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M439687:250523'

Printed on 19 Mar 2026