

Datasheet: MCA1227

BATCH NUMBER 150048

Description:	MOUSE ANTI HUMAN CD42a
Specificity:	CD42a
Other names:	GPIX
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	GRP-P
Isotype:	IgG1
Quantity:	0.2 mg

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	▪			1/10 - 1/100
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
Species Cross Reactivity	Reacts with: Mink, Dog 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 - liquid
Preparation	Purified IgG prepared by ion exchange chromatography

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/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_321696
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 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood
References	<ol style="list-style-type: none"> Sarma, J. <i>et al.</i> (2002) Increased platelet binding to circulating monocytes in acute coronary syndromes. Circulation. 105 (18): 2166-71. Bournazos, S. <i>et al.</i> (2008) Monocyte functional responsiveness after PSGL-1-mediated platelet adhesion is dependent on platelet activation status. Arterioscler Thromb Vasc Biol. 28: 1491-8. 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. Perdomo, J. <i>et al.</i> (2011) Quinine-induced thrombocytopenia: drug-dependent GPIb/IX antibodies inhibit megakaryocyte and proplatelet production in vitro. Blood. 117: 5975-86. 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. 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. 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. 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.](#)

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.](#)

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

Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. 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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1227 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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

'M364983:200529'

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

Printed on 19 Jan 2024

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