

# Datasheet: MCA740PE BATCH NUMBER INN1612

Description:	MOUSE ANTI HUMAN CD42b:RPE
Specificity:	CD42b
Other names:	GPIB-ALPHA
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	AK2
Isotype:	lgG1

## **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 <u>www.bio-</u> 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. The suggested working dilution is given as a guide only. It is recommended that the user titrates the antibody for use in his/her own system using appropriate negative/positive controls.				
Target Species	Human				
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized				
Reconstitution	Reconstitute with 1 ml distilled water				
Max Ex/Em	Fluorophore	Excitation Max (nr	n) 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 sa	lline			
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum A	Albumin			

External Database Links RRID Specificity	UniProt:         P07359       Related reagents         Entrez Gene:       2811       GP1BA       Related reagents         AB_324702       ABuild and the second sec
	block the binding of von Willebrand Factor (VWF) to platelets.
Flow Cytometry	Use 10ul of the suggested working dilution to label 100ul whole blood.
References	<ol> <li>Ward, C.M. &amp; Berndt, M.C. (1995) Epitope and functional characterization of the CD42 (gplb/IX) mAb panel. Leucocyte Typing V. White Cell Differentiation Antigens. Volume Two. Oxford University Press, Oxford.</li> <li>Burgess, J.K. <i>et al.</i> (1998) Quinine-dependent antibodies bind a restricted set of epitopes on the glycoprotein Ib-IX complex: characterization of the epitopes. <u>Blood. 92</u>: <u>2366-73</u>.</li> <li>Burgess, J.K. <i>et al.</i> (2000) Rifampicin-dependent antibodies bind a similar or identical epitope to glycoprotein IX-specific quinine-dependent antibodies. <u>Blood. 95</u>: 1988-92.</li> <li>Jayo, A. <i>et al.</i> (2010) L718P mutation in the membrane-proximal cytoplasmic tail of beta 3 promotes abnormal alpha IIb beta 3 clustering and lipid microdomain coalescence, and associates with a thrombasthenia-like phenotype. <u>Haematologica. 95</u>: 1158-66.</li> <li>Lova, P. <i>et al.</i> (2004) Contribution of protease-activated receptors 1 and 4 and glycoprotein Ib-IX-V in the G(i)-independent activation of platelet Rap1B by thrombin. J <u>Biol Chem. 279: 25299-306</u>.</li> <li>Shen, Y. <i>et al.</i> (2000) Requirement of leucine-rich repeats of glycoprotein (GP) Ibalpha for shear-dependent and static binding of von Willebrand factor to the platelet membrane GP Ib-IX-V complex. <u>Blood. 95: 903-10</u>.</li> <li>Wright, S.D. <i>et al.</i> (1993) Double heterozygosity for mutations in the platelet glycoprotein IX gene in three siblings with Bernard-Soulier syndrome. <u>Blood. 81: 2339-47</u>.</li> <li>Nomura, S. <i>et al.</i> (2008) Platelets undergo phosphorylation of Syk at Y525/526 and Y352 in response to pathophysiological shear stress. <u>Am J Physiol Cell Physiol. 295: C1045-54</u>.</li> <li>Balduini, A. <i>et al.</i> (2008) Adhesive receptors, extracellular proteins and myosin IIA orchestrate proplatelet formation by human megakaryocytes. <u>J Thromb Haemost. 6</u>; <u>1900-7</u>.</li> <li>Amor, N.B. <i>et al.</i> (2009) Acidic-store depletion is required for human platelet aggregation. <u>Blood Coagul Fibrinolysis. 20: 511-6</u>.<!--</th--></li></ol>

	12. Tasneem, S. <i>et al.</i> (2009) Platelet adhesion to multimerin 1 in vitro: influences of platelet membrane receptors, von Willebrand factor and shear. <u>J Thromb Haemost. 7:</u> 685-92.
	13. Lincoln, B. <i>et al.</i> (2010) Integrated system investigating shear-mediated platelet interactions with von Willebrand factor using microliters of whole blood <u>Anal Biochem.</u> 405: 174-83.
	<ol> <li>Goetzl, E.J. <i>et al.</i> (2016) Human plasma platelet-derived exosomes: effects of aspirin.</li> <li><u>FASEB J. 30 (5): 2058-63.</u></li> <li>Michalska-Jakubus, M. <i>et al.</i> (2017) Plasma endothelial microparticles reflect the</li> </ol>
	extent of capillaroscopic alterations and correlate with the severity of skin involvement in systemic sclerosis. <u>Microvasc Res. 110: 24-31.</u>
	<ul> <li>16. Ralph, A. <i>et al.</i> (2016) Computational Tracking of Shear-Mediated Platelet Interactions with von Willebrand Factor. <u>Cardiovasc Eng Technol. 7 (4): 389-405.</u></li> <li>17. Bassi, F. <i>et al.</i> (2018) University and reliable and related the second statement in the second statement of the second statement of</li></ul>
	17. Rossi, E. <i>et al.</i> (2018) Human endoglin as a potential new partner involved in platelet- endothelium interactions. <u>Cell Mol Life Sci. 75 (7): 1269-84.</u>
	18. Kim, J.S. <i>et al.</i> (2021) Randomization to Omega-3 Fatty Acid Supplementation and Endothelial Function in COPD: The COD-Fish Randomized Controlled Trial. <u>Chronic Obstr</u> <u>Pulm Dis. 8(1):41-53.</u>
Storage	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/MCA740PE 20487
Regulatory	For research purposes only
Related Produc	cts

### **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

### **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (
America	Fax: +1 919 878 3751		Fax: +44
	Email: antibody_sales_u	s@bio-rad.com	Email: an

Tel: +44 (0)1865 852 700 Europe Fax: +44 (0)1865 852 739 Email: antibody\_sales\_uk@bio-rad.com 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

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