

# Datasheet: MCA467PE

Description:	MOUSE ANTI HUMAN CD41:RPE
Specificity:	CD41
Other names:	INTEGRIN ALPHA IIB
Format:	RPE
<b>Product Type:</b>	Monoclonal Antibody
Clone:	PM6/248
Isotype:	lgG1
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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. 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	Reacts with: Baboo	n			
Reactivity			ons may vary between species. Cro		
	•	· ·	aboratories, peer-reviewed publications		
	further information.	ations from the originate	ors. Please refer to references indica	ileu	
Product Form	Purified IgG conjug	ated to R. Phycoerythrin	(RPE) - lyophilized		
Reconstitution	Reconstitute with 1	ml distilled water			
Max Ex/Em	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  1% Bovine Serum Albumin  5% Sucrose			
Immunogen	Human platelet plasma membranes.			
External Database	U 15 4			
Links	UniProt:  P08514 Related reagents			
	Entrez Gene:  3674 ITGA2B Related reagents			
Synonyms	GP2B, ITGAB			
RRID	AB_321694			
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.			
Specificity	Mouse anti Human CD41 antibody, clone PM6/248 recognizes the human CD41 cell surface antigen, a ~140 kDa glycoprotein expressed by platelets and megakaryocytes. CD41 is also known as platelet glycoprotein Ilb, and functions as a receptor for fibrinogen, fibronectin and vWF.			
	It has not been established if clone PM6/248 recognizes free CD41 or CD41 only when complexed with CD61. However, antibody binding is reduced in the presence of EDTA suggesting that the epitope recognized is dependent upon an intact CD41/61 complex.			
Flow Cytometry	Use 10ul of the suggested working dilution to label 100ul whole blood.			
References	<ol> <li>Hornby, E.J. <i>et al.</i> (1991) Activation of human platelets by exposure to a monoclonal antibody, PM6/248, to glycoprotein Ilb-Illa. Br J Haematol. 79 (2): 277-85.</li> <li>Michelson, A.D. <i>et al.</i> (1995) A panel of platelet mAb for the study of haemostasis and thrombosis in baboons. Leucocyte Typing V. Oxford University Press p 1230-1231.</li> <li>Zahler, S. <i>et al.</i> (1999) Acute cardiac inflammatory responses to postischemic reperfusion during cardiopulmonary bypass. Cardiovasc Res. 41: 722-30.</li> <li>Massoudy, P. <i>et al.</i> (2001) Evidence for inflammatory responses of the lungs during coronary artery bypass grafting with cardiopulmonary bypass. Chest. 119: 31-6.</li> <li>Wang, J.S. <i>et al.</i> (2005) Effects of exercise training and deconditioning on platelet aggregation induced by alternating shear stress in men. Arterioscler Thromb Vasc Biol. 25: 454-60.</li> <li>Kahng, J. <i>et al.</i> (2008) Quantitative comparisons of antibody-binding sites of platelet glycoprotein Ilb/Illa in aplastic anemia and idiopathic thrombocytopenic purpura. Ann Clin Lab Sci. 38: 6-11.</li> <li>Chae, H. <i>et al.</i> (2009) EDTA Inhibits the Binding of Clone 96.2C1, an Anti-CD41a</li> </ol>			

Monoclonal Antibody, to the Platelets and Addition of Heparin and CaCl2 to the Antibody Neutralizes the EDTA-induced Inhibitory Effect Korean J Hematol 44: 42 - 6.

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- 9. Welsh, J.D. *et al.* (2012) Platelet-targeting sensor reveals thrombin gradients within blood clots forming in microfluidic assays and in mouse. <u>J Thromb Haemost. 10 (11):</u> 2344-53.
- 10. Foruzanmehr, M. *et al.* (2014) Nano-structure TiO<sub>2</sub> film coating on 316L stainless steel via sol-gel technique for blood compatibility improvement Nanomedicine J. 1 (3): 128-36.
- 11. Kamat, V. *et al.* (2015) Microfluidic assessment of functional culture-derived platelets in human thrombi under flow. <u>Exp Hematol. 43 (10): 891-900.e4.</u>
- 12. Miyazaki, K. *et al.* (2015) Immature platelet fraction measurement is influenced by platelet size and is a useful parameter for discrimination of macrothrombocytopenia. <u>Hematology. 20 (10): 587-92.</u>
- 13. Vučetić, D. *et al.* (2018) Flow cytometry analysis of platelet populations: usefulness for monitoringthe storage lesion in pooled buffy-coat platelet concentrates. <u>Blood Transfus. 16</u> (1): 83-92.
- 14. Burdorf, L. *et al.* (2019) Thromboxane and histamine mediate PVR elevation during xenogeneic pig lung perfusion with human blood. Xenotransplantation. 26 (2): e12458.
- 15. Miura, S. *et al.* (2022) Effects of human TFPI and CD47 expression and selectin and integrin inhibition during GalTKO.hCD46 pig lung perfusion with human blood. Xenotransplantation. 29 (2): e12725.
- 16. Chaban, R. *et al.* (2023) Increased human complement pathway regulatory protein gene dose is associated with increased endothelial expression and prolonged survival during ex-vivo perfusion of GTKO pig lungs with human blood. Xenotransplantation. 30 (4): e12812.

#### **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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA467PE">https://www.bio-rad-antibodies.com/SDS/MCA467PE</a> 20487	
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)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M440849:250523'

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