

Datasheet: MCA467A647T

Description:	MOUSE ANTI HUMAN CD41:Alexa Fluor® 647		
Specificity:	CD41		
Other names:	INTEGRIN ALPHA IIB		
Format:	ALEXA FLUOR® 647		
Product Type:	Monoclonal Antibody		
Clone:	PM6/248		
Isotype:	lgG1		
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				Neat - 1/5

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 recomended 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	on			
Reactivity	<b>N.B.</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 conjug	gated to Alexa Fluor® 64	7 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (n	m)	
	Alexa Fluor®647	650	665		
Preparation	Purified IgG prepa supernatant	red by affinity chromatog	raphy on Protein A	A from tissue culture	
Buffer Solution	Phosphate buffere	d saline			

Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin	
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml	
Immunogen	Human platelet plasma membranes.	
External Database Links	UniProt: P08514 Related reagents Entrez Gene:	
	3674 ITGA2B Related reagents	
Synonyms	GP2B, ITGAB	
RRID	AB_1102019	
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 IIb, 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 IIb-IIIa. 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 IIb/IIIa 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.
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- 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. 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.

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

#### Acknowledgements

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**Health And Safety** Material Safety Datasheet documentation #10041 available at: Information https://www.bio-rad-antibodies.com/SDS/MCA467A647T 10041 Regulatory For research purposes only

# **Related Products**

## **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 647 (MCA928A647)

## **Recommended Useful Reagents**

**HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)** 

North & South Tel: +1 800 265 7376 America Fax: +1 919 878 3751 Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21

Email: antibody\_sales\_us@bio-rad.com

Email: antibody\_sales\_uk@bio-rad.com

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 'M405532:220916'

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