Datasheet: MCA467F

Description:	MOUSE ANTI HUMAN CD41:FITC
Specificity:	CD41
Other names:	INTEGRIN ALPHA IIB
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	PM6/248
Isotype:	IgG1
Quantity:	0.1 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	▪			Neat - 1/10

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 Reactivity

Reacts with: Baboon, Mink, Mustelid
N.B. Antibody reactivity and working conditions may vary between species.

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.1 mg/ml

Immunogen

Human platelet plasma membranes.

External Database Links	**UniProt:** P08514 Related reagents **Entrez Gene:** 3674 ITGA2B Related reagents
Synonyms	GP2B, ITGAB
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	1. Hornby, E.J. *et al.* (1991) Activation of human platelets by exposure to a monoclonal antibody, PM6/248, to glycoprotein IIb-IIIa. Br J Haematol. 79 (2): 277-85. 2. Michelson, A.D. *et al*. (1995) A panel of platelet mAb for the study of haemostasis and thrombosis in baboons. Leucocyte Typing V. Oxford University Press p 1230-1231. 3. Maloney, S.F. *ety al.* (2010) P2Y12 or P2Y1 inhibitors reduce platelet deposition in a microfluidic model of thrombosis while apyrase lacks efficacy under flow conditions. Integr Biol (Camb). 2: 183-92. 4. Aasted, B. *et al.* (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. Vet Immunol Immunopathol. 119: 27-37. 5. Massoudy, P. *et al.* (2001) Evidence for inflammatory responses of the lungs during coronary artery bypass grafting with cardiopulmonary bypass. Chest. 119: 31-6. 6. Kahng, J. *et al.* (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. 7. Chae, H. *et al.* (2009) EDTA Inhibits the Binding of Clone 96.2C1, an Anti-CD41a 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. 8. Zahler, S. *et al.* (1999) Acute cardiac inflammatory responses to postischemic reperfusion during cardiopulmonary bypass. Cardiovasc Res. 41: 722-30. 9. Wang, J.S. *et al.* (2005) Effects of exercise training and deconditioning on platelet aggregation induced by alternating shear stress in men. Arterioscler Thromb Vasc Biol. 25: 454-60. 10. Welsh, J.D. *et al.* (2012) Platelet-targeting sensor reveals thrombin gradients within blood clots forming in microfluidic assays and in mouse. J Thromb Haemost. 10 (11): 2344-53. 11. Kamat, V. *et al.* (2015) Microfluidic assessment of functional culture-derived platelets in human thrombi under flow. Exp Hematol. 43 (10): 891-900.e4. 12. Vučetić, D. *et al.* (2018) Flow cytometry analysis of platelet populations: usefulness for monitoringthe storage lesion in pooled buffy-coat platelet concentrates. Blood Transfus. 16 (1): 83-92. 13. Foruzanmehr, M. *et al.* (2014) Nano-structure TiO_2 film coating on 316L stainless steel via sol-gel technique for blood compatibility improvement Nanomedicine J. 1 (3): 128-36.
Storage	Store at +4^{o}C or at -20^{o}C if preferred.

	This product should be stored undiluted. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

North & South America	Tel: +1 800 265 7376 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	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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