

Datasheet: MCA2245P647

Description:	RAT ANTI MOUSE CD41:RPE-Alexa Fluor® 647
Specificity:	CD41
Other names:	INTEGRIN ALPHA IIB
Format:	RPE-ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	MWReg30
Isotype:	IgG1
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			Neat

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Mouse
Product Form	Purified IgG conjugated to RPE-Alexa Fluor® 647 - lyophilized

Reconstitution	Reconstitute with 1.0 ml distilled water. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.
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Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE-Alexa Fluor®647 488nm laser	496	667
	RPE-Alexa Fluor®647 561nm laser	546	667

Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
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Buffer Solution	Phosphate buffered saline
Preservative	0.09% sodium azide (NaN ₃)
Stabilisers	1% bovine serum albumin 5% sucrose
Immunogen	Purified murine platelets
External Database Links	<p>UniProt: Q9QUM0 Related reagents</p> <p>Entrez Gene: 16399 Itga2b Related reagents</p>
Specificity	<p>Rat anti Mouse CD41 antibody, clone MWReg30 recognizes the mouse integrin alpha IIb subunit CD41. CD41 is a ~125 kDa single pass type 1 transmembrane glycoprotein expressed by platelets, megakaryocytes (Zhang et al. 2007), mast cells (Berlanga et al. 2005), and hematopoietic progenitors (Mitjavila-Garcia et al. 2002). CD41 forms a heterodimer with CD61.</p> <p>The CD41/CD61 complex is important for platelet adhesion and aggregation (Patel et al. 2003) acting as a receptor for many extracellular matrix proteins including fibronectin, thrombospondin and vitronectin (Weisel et al. 1992).</p> <p>Rat anti mouse CD41, clone MWReg30 has been reported to inhibit PMA induced aggregation <i>in vitro</i> and to induce hypothermia <i>in vivo</i> (Nieswandt et al. 1999).</p>
Flow Cytometry	<p>Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl.</p> <p>The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/BUF041B).</p>
References	<ol style="list-style-type: none"> 1. Larson, M.K. and Watson, S.P. (2006) Regulation of proplatelet formation and platelet release by integrin alpha IIb beta3. Blood. 108: 1509-14. 2. Tamagawa-Mineoka, R. et al. (2007) The role of platelets in leukocyte recruitment in chronic contact hypersensitivity induced by repeated elicitation. Am J Pathol. 170: 2019-29. 3. Lutskiy, M.I. et al. (2007) WASP localizes to the membrane skeleton of platelets. Br J Haematol. 139: 98-105. 4. Perez, L.E. et al. (2008) SH2-inositol phosphatase 1 negatively influences early megakaryocyte progenitors. PLoS One. 3: e3565. 5. Zanzinger, K. et al. (2009) Regulation of triggering receptor expressed on myeloid cells 1 expression on mouse inflammatory monocytes. Immunology. 128: 185-95. 6. Winter, O. et al. (2010) Megakaryocytes constitute a functional component of a plasma cell niche in the bone marrow. Blood. 116: 1867-75. 7. Takayama, M. et al. (2010) Genetic analysis of hierarchical regulation for Gata1 and NF-E2 p45 gene expression in megakaryopoiesis. Mol Cell Biol. 30: 2668-80. 8. Sullivan, B.P. et al. (2010) Protective and damaging effects of platelets in acute

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Storage

Prior to reconstitution store at +4°C.
 After reconstitution store at +4°C.
 DO NOT FREEZE.
 This product should be stored undiluted. 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 Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA2245P647 20487
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Regulatory	For research purposes only
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Related Products

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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