

## Datasheet: MCA2245PE

<b>Description:</b>	RAT ANTI MOUSE CD41:RPE
<b>Specificity:</b>	CD41
<b>Other names:</b>	INTEGRIN ALPHA IIB
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MWReg30
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-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. 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.

<b>Target Species</b>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized						
<b>Reconstitution</b>	Reconstitute with 1 ml distilled water						
<b>Max Ex/Em</b>	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
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RPE 488nm laser	496	578					
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
<b>Buffer Solution</b>	Phosphate buffered saline						
<b>Preservative</b>	0.09% Sodium Azide						
<b>Stabilisers</b>	1% Bovine Serum Albumin 5% Sucrose						

<b>Immunogen</b>	Purified murine platelets
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q9QUM0</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">16399</a> Itga2b    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_324625
<b>Specificity</b>	<p><b>Rat anti Mouse CD41 antibody, clone MWReg30</b> recognizes the mouse integrin alpha IIb subunit CD41. CD41 is a ~125 kDa single pass type 1 transmembrane glycoprotein expressed by platelets, megakaryocytes (<a href="#">Zhang <i>et al.</i> 2007</a>), mast cells (<a href="#">Berlanga <i>et al.</i> 2005</a>), and hematopoietic progenitors (<a href="#">Mitjavila-Garcia <i>et al.</i> 2002</a>). CD41 forms a heterodimer with <a href="#">CD61</a>.</p> <p>The CD41/CD61 complex is important for platelet adhesion and aggregation (<a href="#">Patel <i>et al.</i> 2003</a>) acting as a receptor for many extracellular matrix proteins including fibronectin, thrombospondin and vitronectin (<a href="#">Weisel <i>et al.</i> 1992</a>).</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> (<a href="#">Nieswandt <i>et al.</i> 1999</a>).</p>
<b>Flow Cytometry</b>	<p>Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.</p> <p>The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR (<a href="#">BUF041A/B</a>).</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Winter, O. <i>et al.</i> (2010) Megakaryocytes constitute a functional component of a plasma cell niche in the bone marrow. <a href="#">Blood. 116: 1867-75.</a></li> <li>2. Tamagawa-Mineoka, R. <i>et al.</i> (2007) The role of platelets in leukocyte recruitment in chronic contact hypersensitivity induced by repeated elicitation. <a href="#">Am J Pathol. 170: 2019-29.</a></li> <li>3. Takayama, M. <i>et al.</i> (2010) Genetic analysis of hierarchical regulation for Gata1 and NF-E2 p45 gene expression in megakaryopoiesis. <a href="#">Mol Cell Biol. 30: 2668-80.</a></li> <li>4. Larson, M.K. and Watson, S.P. (2006) Regulation of proplatelet formation and platelet release by integrin alpha IIb beta3. <a href="#">Blood. 108: 1509-14.</a></li> <li>5. Zanzinger, K. <i>et al.</i> (2009) Regulation of triggering receptor expressed on myeloid cells 1 expression on mouse inflammatory monocytes. <a href="#">Immunology. 128: 185-95.</a></li> <li>6. Lutskiy, M.I. <i>et al.</i> (2007) WASP localizes to the membrane skeleton of platelets. <a href="#">Br J Haematol. 139: 98-105.</a></li> <li>7. Sullivan, B.P. <i>et al.</i> (2010) Protective and damaging effects of platelets in acute cholestatic liver injury revealed by depletion and inhibition strategies. <a href="#">Toxicol Sci. 115: 286-94.</a></li> <li>8. Fujita, R. <i>et al.</i> (2013) NF-E2 p45 Is Important for Establishing Normal Function of Platelets. <a href="#">Mol Cell Biol. 33: 2659-70.</a></li> <li>9. Perez, L.E. <i>et al.</i> (2008) SH2-inositol phosphatase 1 negatively influences early</li> </ol>

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #20487 available at: 20487: <https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf>

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**Regulatory**

For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto:antibody_sales_uk@bio-rad.com)

'M375446:210104'

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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