

## Datasheet: MCA2245F

<b>Description:</b>	RAT ANTI MOUSE CD41:FITC
<b>Specificity:</b>	CD41
<b>Other names:</b>	INTEGRIN ALPHA IIB
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MWReg30
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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 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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
<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>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
FITC	490	525					
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant						
<b>Buffer Solution</b>	Phosphate buffered saline						
<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin						
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml						

<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_324532
<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>

- megakaryocyte progenitors. [PLoS One. 3: e3565.](#)
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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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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 \(BUF041B\)](#)

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

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