

## Datasheet: MCA2245

<b>Description:</b>	RAT ANTI MOUSE CD41
<b>Specificity:</b>	CD41
<b>Other names:</b>	INTEGRIN ALPHA IIB
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MWReg30
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.25 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	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<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 Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 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_323512
<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 et al. 2007</a>), mast cells (<a href="#">Berlanga et al. 2005</a>), and hematopoietic progenitors (<a href="#">Mitjavila-Garcia et al. 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 et al. 2003</a>) acting as a receptor for many extracellular matrix proteins including fibronectin, thrombospondin and vitronectin (<a href="#">Weisel et al. 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 et al. 1999</a>).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>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>Tamagawa-Mineoka, R. et al. (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>Lutskiy, M.I. et al. (2007) WASP localizes to the membrane skeleton of platelets. <a href="#">Br J Haematol. 139: 98-105.</a></li> <li>Perez, L.E. et al. (2008) SH2-inositol phosphatase 1 negatively influences early megakaryocyte progenitors. <a href="#">PLoS One. 3: e3565.</a></li> <li>Zanzinger, K. et al. (2009) Regulation of triggering receptor expressed on myeloid cells 1 expression on mouse inflammatory monocytes. <a href="#">Immunology. 128: 185-95.</a></li> <li>Winter, O. et al. (2010) Megakaryocytes constitute a functional component of a plasma cell niche in the bone marrow. <a href="#">Blood. 116: 1867-75.</a></li> <li>Takayama, M. et al. (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>Sullivan, B.P. et al. (2010) Protective and damaging effects of platelets in acute cholestatic liver injury revealed by depletion and inhibition strategies. <a href="#">Toxicol Sci. 115:</a></li> </ol>

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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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2245>  
10040

## Related Products

### Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>

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