

## Datasheet: MCA2245SBV610

<b>Description:</b>	RAT ANTI MOUSE CD41:StarBright Violet 610
<b>Specificity:</b>	CD41
<b>Other names:</b>	INTEGRIN ALPHA IIB
<b>Format:</b>	StarBright Violet 610
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MWReg30
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS/0.5ml

### 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 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 conjugated to StarBright Violet 610 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	StarBright Violet 610	403	607
<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> ) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20		

<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_2943392
<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>	Use 5µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
<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. <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>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>Perez, L.E. <i>et al.</i> (2008) SH2-inositol phosphatase 1 negatively influences early megakaryocyte progenitors. <a href="#">PLoS One. 3: e3565.</a></li> <li>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>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>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>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>Motohashi, H. <i>et al.</i> (2010) NF-E2 domination over Nrf2 promotes ROS accumulation and megakaryocytic maturation. <a href="#">Blood. 115 (3): 677-86.</a></li> <li>Göçmen, A.Y. <i>et al.</i> (2011) Effect of resveratrol on platelet activation in</li> </ol>

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<b>Storage</b>	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20471 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2245SBV610">https://www.bio-rad-antibodies.com/SDS/MCA2245SBV610</a> 20471
<b>Regulatory</b>	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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