

Datasheet: MCA2245SBB700

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| Description: | RAT ANTI MOUSE CD41:StarBright Blue 700 |
| Specificity: | CD41 |
| Other names: | INTEGRIN ALPHA IIB |
| Format: | StarBright Blue 700 |
| Product Type: | Monoclonal Antibody |
| Clone: | MWReg30 |
| Isotype: | IgG1 |
| Quantity: | 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.

| | 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.

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| Target Species | Mouse | | |
| Product Form | Purified IgG conjugated to StarBright Blue 700 - liquid | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | StarBright Blue 700 | 473 | 703 |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant | | |
| Buffer Solution | Phosphate buffered saline | | |
| Preservative Stabilisers | 0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20 | | |

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| 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 | Use 5µl of the suggested working dilution to label 10 ⁶ cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application. |
| 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 cholestatic liver injury revealed by depletion and inhibition strategies. Toxicol Sci. 115: 286-94. 9. Motohashi, H. et al. (2010) NF-E2 domination over Nrf2 promotes ROS accumulation and megakaryocytic maturation. Blood. 115 (3): 677-86. 10. Göçmen, A.Y. et al. (2011) Effect of resveratrol on platelet activation in hypercholesterolemic rats: CD40-CD40L system as a potential target. Appl Physiol Nutr Metab. 36 (3): 323-30. |

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| Storage | Store at +4°C. DO NOT FREEZE. This product should be stored undiluted. |
| Guarantee | 12 months from date of despatch |
| Acknowledgements | This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts |
| Health And Safety Information | Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA2245SBB700 20471 |
| Regulatory | For research purposes only |

Related Products

Recommended Useful Reagents

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

MOUSE SEROBLOCK FcR (BUF041B)

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|----------------------------------|---|------------------|---|---------------|---|
| North & South America | Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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 | Europe | Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com |
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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

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