

Datasheet: MCA2245F BATCH NUMBER 167277

| Description:  | RAT ANTI MOUSE CD41:FITC |
|---------------|--------------------------|
| Specificity:  | CD41                     |
| Other names:  | INTEGRIN ALPHA IIB       |
| Format:       | FITC                     |
| Product Type: | Monoclonal Antibody      |
| Clone:        | MWReg30                  |
| Isotype:      | lgG1                     |
| Quantity:     | 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

|                | Yes | No | Not Determined | Suggested Dilution |
|----------------|-----|----|----------------|--------------------|
| Flow Cytometry |     |    |                | Neat - 1/10        |

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.

| arget Species               | Mouse  |                          |                     |
|-----------------------------|--|--------------------------|---------------------|
| roduct Form                 | Purified IgG conjugate                       | ed to Fluorescein Isoth  | niocyanate Isomer 1 |
| ax Ex/Em                    | Fluorophore                                  | Excitation Max (nm)      | Emission Max (nm    |
|                             | FITC   | 490                      | 525                 |
| eparation<br>uffer Solution | supernatant  Phosphate buffered s            | l by affinity chromatogo | Taphy on Flotelli A |
| servative<br>pilisers       | 0.09% sodium azide (<br>1% bovine serum albi | . 0,                     |                     |
| rox. Protein                |  |                          |                     |

| Concentrations             |   |
|----------------------------|---|
| Immunogen                  | Purified murine platelets   |
| External Database<br>Links | UniProt:  Q9QUM0 Related reagents   |
|                            | Entrez Gene:  16399 Itga2b Related reagents   |
| RRID                       | AB_324532   |
| Specificity                | 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.   |
|                            | The CD41/CD61 complex is important for platelet adhesion and aggregation ( <u>Patel et al.</u> 2003) acting as a receptor for many extracellular matrix proteins including fibronectin, thrombospondin and vitronectin ( <u>Weisel et al. 1992</u> ).   |
|                            | 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 <i>et al.</i> 1999).  |
| Flow Cytometry             | Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl.  The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/BUF041B).   |
| References                 | <ol> <li>Larson, M.K. and Watson, S.P. (2006) Regulation of proplatelet formation and platelet release by integrin alpha IIb beta3. <u>Blood. 108: 1509-14.</u></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. <u>Am J Pathol. 170: 2019-29.</u></li> <li>Lutskiy, M.I. <i>et al.</i> (2007) WASP localizes to the membrane skeleton of platelets. <u>Br J</u></li> </ol> |

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- 15. Flierl, U. *et al.* (2015) Phosphorothioate backbone modifications of nucleotide-based drugs are potent platelet activators. <u>J Exp Med. 212 (2): 129-37.</u>
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- 17. Cuccurullo, A. *et al.* (2016) Blockade of Thrombopoietin Reduces Organ Damage in Experimental Endotoxemia and Polymicrobial Sepsis. PLoS One. 11 (3): e0151088.
- 18. Ryan, J. *et al.* (2016) Myeloid cell-mediated renal injury in rapidly progressive glomerulonephritis depends upon spleen tyrosine kinase. J Pathol. 238 (1): 10-20.
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- 23. Moore, S.F. *et al.* (2021) Opposing Roles of GSK3α and GSK3β Phosphorylation in Platelet Function and Thrombosis. Int J Mol Sci. 22(19):10656.

#### 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.

### Guarantee

12 months from date of despatch

# Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2245F">https://www.bio-rad-antibodies.com/SDS/MCA2245F</a> 10041

**Regulatory** For research purposes only

# **Related Products**

# **Recommended Useful Reagents**

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +44 (0)1865 852 739
Email: antibody\_sales\_uk@bio-rad.com

Fax: +49 (0) 89 8090 95 50

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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 'M413537:221123'

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