

Datasheet: MCA2245A488

Description:	RAT ANTI MOUSE CD41:Alexa Fluor® 488
Specificity:	CD41
Other names:	INTEGRIN ALPHA IIB
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	MWReg30
Isotype:	lgG1
Quantity:	100 TESTS/1ml

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.

Target Species	Mouse		
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Product Form	Purified IgG conjugate	ed to Alexa Fluor® 48	8 - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nn
	Alexa Fluor®488	495	519
Preparation Buffer Solution	Purified IgG prepared supernatant		raphy on Protein G
Buller Solution	Phosphate buffered sa		
Preservative	0.09% sodium azide (NaN ₃)	
Stabilisers	1% bovine serum albu	ımin	
Approx. Protein Concentrations	lg concentration 0.05	mg/ml	

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Purified murine platelets

External Database Links

UniProt:

Q9QUM0 Related reagents

Entrez Gene:

16399 Itga2b Related reagents

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.</u> 1992).

Rat anti mouse CD41, clone MWReg30 has been reported to inhibit PMA induced aggregation *in vitro* and to induce hypothermia *in vivo* (Nieswandt *et al.* 1999).

Flow Cytometry

Use 10μl of the suggested working dilution to label 10⁶ 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

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- 14. Woods, S.J. *et al.* (2015) Kinetic profiling of *in vivo* lung cellular inflammatory responses to mechanical ventilation. <u>Am J Physiol Lung Cell Mol Physiol. 308 (9):</u> L912-21.
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- 16. Devanathan, V. *et al.* (2015) Platelet Gi protein Gαi2 is an essential mediator of thrombo-inflammatory organ damage in mice. <u>Proc Natl Acad Sci U S A. 112 (20): 6491-6.</u>
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- 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.
- 19. Criel, M. *et al.* (2016) Absence of Pear1 does not affect murine platelet function *in vivo*. Thromb Res. 146: 76-83.
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- 21. Williams, C.M. *et al.* (2016) Identification of roles for the SNARE-associated protein, SNAP29, in mouse platelets. <u>Platelets. 27 (4): 286-94.</u>
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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.

Guarantee

12 months from date of despatch

Acknowledgements

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Health And Safety Information

Material Safety Datasheet documentation #10041 available at:

https://www.bio-rad-antibodies.com/SDS/MCA2245A488

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

Worldwide Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

America Fax: +

Fax: +1 919 878 3751

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Email: antibody_sales_uk@bio-rad.com

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M413535:221123'

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