

Datasheet: MCA2245B

Description:	RAT ANTI MOUSE CD41:Biotin		
Specificity:	CD41		
Other names:	INTEGRIN ALPHA IIB		
Format:	Biotin		
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 www.bio-rad-antibodies.com/protocols.

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

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Mouse	
Product Form	Purified IgG conjugated to Biotin - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein G supernatant	G from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% Sodium Azide1% Bovine Serum Albumin	
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml	
Immunogen	Purified murine platelets	

External Database Links

UniProt:

Q9QUM0 Related reagents

Entrez Gene:

16399 Itga2b Related reagents

RRID

AB 323941

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 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).

References

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- 11. Motohashi, H. *et al.* (2010) NF-E2 domination over Nrf2 promotes ROS accumulation and megakaryocytic maturation. <u>Blood. 115 (3): 677-86.</u>
- 12. 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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- 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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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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

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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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