

Datasheet: MCA743PE

Description:	MOUSE ANTI HUMAN CD49b:RPE
Specificity:	CD49b
Other names:	INTEGRIN ALPHA 2 CHAIN, VLA-2
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	AK7
Isotype:	IgG1
Quantity:	100 TESTS

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 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	Human		
Species Cross Reactivity	Reacts with: Cynomolgus monkey, Rhesus Monkey, Baboon N.B. Antibody reactivity and working conditions may vary between species.		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1%	Bovine Serum Albumin	
	5%	Sucrose	
External Database Links	UniProt: P17301 Related reagents		

Entrez Gene:[3673](#) [ITGA2](#) [Related reagents](#)

Synonyms	CD49B
Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	Mouse anti Human CD49b antibody, clone AK7 recognizes the integrin alpha 2 subunit, a ~160 kDa glycoprotein that non-covalently associates with the ~130 kDa integrin beta 1 subunit to form the VLA-2 complex. CD49b is expressed by platelets, long term cultivated T cells, approximately 50% of monocytes and most adherent cell lines. Mouse anti Human CD49b antibody, clone AK7 inhibits cell attachment to collagen.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood
References	1. Favaloro, E.J. <i>et al.</i> (1990) Co-expression of haemopoietic antigens on vascular endothelial cells: a detailed phenotypic analysis. Br J Haematol. 74 (4): 385-94. 2. Mazurov, A.V. <i>et al.</i> (1991) A monoclonal antibody, VM64, reacts with a 130 kDa glycoprotein common to platelets and endothelial cells: heterogeneity in antibody binding to human aortic endothelial cells. Thromb Haemost. 66 (4): 494-9. 3. Yoshino N <i>et al.</i> (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (<i>Macaca fascicularis</i>) by using anti-human cross-reactive antibodies. Exp Anim. 49 (2): 97-110. 4. Ciarlet, M. <i>et al.</i> (2002) VLA-2 (alpha2beta1) integrin promotes rotavirus entry into cells but is not necessary for rotavirus attachment. J Virol. 76 (3): 1109-23. 5. Cavers, M. <i>et al.</i> (2002) Differential expression of beta1 and beta2 integrins and L-selectin on CD4+ and CD8+ T lymphocytes in human blood: comparative analysis between isolated cells, whole blood samples and cryopreserved preparations. Clin Exp Immunol. 127: 60-5. 6. Mörtberg A <i>et al.</i> (2016) Sensitive detection of platelet-specific antibodies with a modified MAIPA using biotinylated antibodies and streptavidin-coated beads. J Immunol Methods. 434: 9-15. 7. Rane, J.K. <i>et al.</i> (2016) Inhibition of the glucocorticoid receptor results in an enhanced miR-99a/100-mediated radiation response in stem-like cells from human prostate cancers. Oncotarget. 7 (32): 51965-80. 8. Koutsogiannaki S. & Kaloyianni M. (2011) Effect of 17β-estradiol on adhesion of <i>Mytilus galloprovincialis</i> hemocytes to selected substrates. Role of alpha2 integrin subunit Fish & Shellfish Immunology. 31 (1): 73-80. 9. Hamaia, S.W. <i>et al.</i> (2012) Mapping of potent and specific binding motifs, GLOGEN and GVOGEA, for integrin α1β1 using collagen toolkits II and III. J Biol Chem. 287 (31): 26019-28. 10. Koutsogiannaki, S. & Kaloyianni, M. (2011) Effect of 17β-estradiol on adhesion of <i>Mytilus galloprovincialis</i> hemocytes to selected substrates. Role of alpha2 integrin subunit. Fish Shellfish Immunol. 31 (1): 73-80.
Storage	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	12 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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
----------------------------------	---	------------------	---	---------------	---

'M306516:170616'

Printed on 01 Aug 2018

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)