Datasheet: MCA743PE

BATCH NUMBER 147815

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. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

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 A from tissue culture

	supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose
External Database Links	**UniProt:** P17301 Related reagents **Entrez Gene:** 3673 ITGA2 Related reagents
Synonyms	CD49B
RRID	AB_324702
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. *et al.* (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. *et al.* (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 *et al.* (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies. Exp Anim. 49 (2): 97-110. 4. Koutsogiannaki, S. & Kaloyianni, M. (2011) Effect of 17β-estradiol on adhesion of *Mytilus galloprovincialis* hemocytes to selected substrates. Role of alpha2 integrin subunit. Fish Shellfish Immunol. 31 (1): 73-80. 5. Cavers, M. *et al.* (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 *et al.* (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. *et al.* (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. Hamaia, S.W. *et al.* (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.
9. García-gareta, E. *et al.* (2019) Engineering the migration and attachment behaviour of primary dermal fibroblasts. Biotechnol Bioeng. Jan 19 [Epub ahead of print].

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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA743PE 20487
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)

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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
'M375655:210104'

Printed on 28 Aug 2024

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