

Datasheet: MCA743EL

Description:	MOUSE ANTI HUMAN CD49b:Low Endotoxin
Specificity:	CD49b
Other names:	INTEGRIN ALPHA 2 CHAIN, VLA-2
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	AK7
Isotype:	IgG1
Quantity:	0.5 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	▪			1/50 - 1/100
Immunohistology - Frozen (1)	▪			1/500 - 1/1000
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays	▪			

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.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

Target Species	Human
Species Cross Reactivity	<p>Reacts with: Cynomolgus monkey, Rhesus Monkey, Baboon</p> <p>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.</p>

Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Carrier Free	Yes
Endotoxin Level	< 0.01 EU/ug
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
External Database Links	<p>UniProt: P17301 Related reagents</p> <p>Entrez Gene: 3673 ITGA2 Related reagents</p>
Synonyms	CD49B
RRID	AB_2232663
Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<p>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.</p> <p>CD49b is expressed by platelets, long term cultivated T cells, approximately 50% of monocytes and most adherent cell lines.</p> <p>Mouse anti Human CD49b antibody, clone AK7 inhibits cell attachment to collagen.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 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. Koutsogiannaki, S. & Kaloyianni, M. (2011) Effect of 17 β -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 $\alpha 1\beta 1$ using collagen toolkits II and III. [J Biol Chem. 287 \(31\): 26019-28.](#)
 9. Garcia-gareta, E. *et al.* (2019) Engineering the migration and attachment behaviour of primary dermal fibroblasts. [Biotechnol Bioeng. Jan 19 \[Epub ahead of print\].](#)

Storage

Store at -20°C only.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. 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 #10162 available at: 10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#),
[DyLight®800](#), [FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin \(MCA928EL\)](#)

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M368863:200529'

Printed on 29 Aug 2021

© 2021 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)