

Datasheet: MCA743FT

Description:	MOUSE ANTI HUMAN CD49b:FITC
Specificity:	CD49b
Other names:	INTEGRIN ALPHA 2 CHAIN, VLA-2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	AK7
Isotype:	IgG1
Quantity:	25 µg

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 - 1/5

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. The suggested working dilution is 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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid.		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
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		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		
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 10⁶ cells or 100ul whole blood

References

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4. Ciarlet, M. *et al.* (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. *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. 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 Immunology. 31 \(1\): 73-80.](#)
9. 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.](#)
10. 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.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	18 months from date of despatch.
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

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

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

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'M306518:170616'

Printed on 01 Aug 2018

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