

Datasheet: MCA2025A488

Description:	MOUSE ANTI HUMAN CD49b:Alexa Fluor® 488
Specificity:	CD49b
Other names:	INTEGRIN ALPHA 2 CHAIN, VLA-2
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	16B4
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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 product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Human		
Species Cross Reactivity	Does not react with:Rat		
Product Form	Purified IgG conjugated to Alexa Fluor® 488 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®488	495	519
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		

Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Purified human beta 1 preparation from HT1080 fibrosarcoma cell extract
External Database Links	<p>UniProt: P17301 Related reagents</p> <p>Entrez Gene: 3673 ITGA2 Related reagents</p>
Synonyms	CD49B
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the X63/Ag8.653 mouse myeloma cell line
Specificity	Mouse anti Human CD49b antibody, clone 16B4 recognizes human CD49b, also known as integrin $\alpha 2$, collagen receptor, Platelet membrane glycoprotein Ia or VLA-2 subunit alpha. CD49b is a 1181 amino acid ~160 kDa single pass type-1 transmembrane glycoprotein possessing multiple FG-GAP repeats and a single VWFA domain. Mouse anti human CD49b antibody, clone 16B4 is identified as capable of immunoprecipitating a non-reducible alpha subunit from I ¹²⁵ surface labeled human cell line extract. It is confirmed as specific to the alpha 2 subunit by relative expression of antigen on various cell lines by FACS, and its recognition of affinity purified alpha 2 beta 1 in dot blots.
References	<ol style="list-style-type: none"> 1. Fitter, S. <i>et al.</i> (1999) Transmembrane 4 superfamily protein CD151 (PETA-3) associates with beta 1 and alpha IIb beta 3 integrins in haemopoietic cell lines and modulates cell-cell adhesion. Biochem J. 338 (Pt 1): 61-70. 2. Sincock, P.M. <i>et al.</i> (1999) PETA-3/CD151, a member of the transmembrane 4 superfamily, is localised to the plasma membrane and endocytic system of endothelial cells, associates with multiple integrins and modulates cell function. J Cell Sci. 112 (Pt 6): 833-44. 3. Eaton, C.L. <i>et al.</i> (2010) Evaluation of the frequency of putative prostate cancer stem cells in primary and metastatic prostate cancer. Prostate. 70 (8): 875-82. 4. Gassmann, P. <i>et al.</i> (2009) CXCR4 regulates the early extravasation of metastatic tumor cells <i>in vivo</i>. Neoplasia. 11: 651-61. 5. Gassmann, P. <i>et al.</i> (2010) <i>In vivo</i> tumor cell adhesion in the pulmonary microvasculature is exclusively mediated by tumor cell--endothelial cell interaction. BMC Cancer. 10: 177. 6. Ivaska, J. <i>et al.</i> (2005) PKCepsilon-mediated phosphorylation of vimentin controls integrin recycling and motility. EMBO J. 24: 3834-45. 7. Pellinen, T. <i>et al.</i> (2006) Small GTPase Rab21 regulates cell adhesion and controls endosomal traffic of beta1-integrins. J Cell Biol. 173: 767-80. 8. Upla, P. <i>et al.</i> (2004) Clustering induces a lateral redistribution of alpha 2 beta 1 integrin from membrane rafts to caveolae and subsequent protein kinase C-dependent internalization. Mol Biol Cell. 15: 625-36. 9. Jokinen, J. <i>et al.</i> (2010) Molecular mechanism of alpha2beta1 integrin interaction with

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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. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2025A488>
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Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA928A488\)](#)

Recommended Useful Reagents

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

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

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