

Datasheet: MCA2025A488

BATCH NUMBER 1808

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 α 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"> 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. 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. 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. Gassmann, P. <i>et al.</i> (2009) CXCR4 regulates the early extravasation of metastatic tumor cells in vivo. Neoplasia. 11: 651-61. 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. Ivaska, J. <i>et al.</i> (2005) PKCepsilon-mediated phosphorylation of vimentin controls integrin recycling and motility. EMBO J. 24: 3834-45. 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. 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

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Storage Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. 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.

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>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

North & South Tel: +1 800 265 7376

America 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

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