

Datasheet: MCA1189

Description:	MOUSE ANTI HUMAN CD29		
Specificity:	CD29		
Other names: INTEGRIN BETA 1 CHAI			
Format:	Ig Fraction		
Product Type:	Monoclonal Antibody		
Clone:	JB1B		
Isotype:	lgG2a		
Quantity:	0.2 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 <u>www.bio-rad-antibodies.com/protocols</u>.

		Yes	No	Not Determined	Suggested Dilution	
	Flow Cytometry				1ug/10 ⁶ cells	
	Immunohistology - Frozen	•			5ug/ml	
	Immunohistology -					
	Paraffin					
	ELISA	-			0.1ug/ml - 1ug/ml	
	Immunoprecipitation	•			1-5ug	
	Western Blotting	•				
	Where this antibody has	not beer	n tested fo	or use in a particular te	echnique this does not	
	necessarily exclude its u	se in suc	ch proced	ures. Suggested work	ing dilutions are given as	
	a guide only. It is recomr system using appropriate				ly for use in their own	
Target Species	Human					
Species Cross	Reacts with: Pig, Cynom	olgus mo	onkey, Rh	esus Monkey		
Reactivity	Does not react with:Rat					
	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					
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	•	s from th	ie originat	ors. Please refer to re	•	

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				
Approx. Protein Concentrations	Ig concentration 0.5 mg/ml				
Immunogen	Purified Human beta1 integrin				
External Database Links	UniProt: P05556 Related reagents Entrez Gene:				
	<u>3688</u> ITGB1 <u>Related reagents</u>				
Synonyms	FNRB, MDF2, MSK12				
RRID	AB_321645				
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the NS1 mouse myeloma cell line.				
Specificity	Mouse anti Human CD29 antibody, clone JB1B recognizes human integrin beta1, also known as CD29, Fibronectin receptor subunit beta, Glycoprotein IIa or VLA-4 subunit beta. CD29 is a 798 amino acid ~130 kDa single pass type-1 transmembrane glycoprotein containing a single <u>VWFA</u> domain. Specificity for CD29 has been confirmed with integrin beta1 transfectants and by reciprocal preclearing of beta1 reactivity with anti-beta1 antibody.				
	Mouse anti Human CD29 antibody, clone JB1B has been successfully employed for the detection of porcine CD29 in formalin fixed, paraffin embedded material (<u>Papageorgiou et</u> <u>al. 2014</u>) and also to stimulate the adherence of several cell types (<u>Wilkins et al. 1996</u>).				
	The removal of azide is recommended prior to use in functional assays.				
References	 Stupack, D.G. <i>et al.</i> (1994) Control of lymphocyte integrin function: evidence for multiple contributing factors. <u>Cell Immunol. 155 (1): 237-45.</u> Wilkins, J.A. <i>et al.</i> (1996) Control of beta1 integrin function. Localization of stimulatory epitopes. <u>J Biol Chem. 271 (6): 3046-51.</u> 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. <u>Exp Anim. 49 (2): 97-110.</u> Batista da Silva, A.P. <i>et al.</i> (2004) The major outer sheath protein of <i>Treponema</i> <i>denticola</i> inhibits the binding step of collagen phagocytosis in fibroblasts. <u>Cell Microbiol. 6</u>: 				

	<u>485-98.</u>
	5. Levite, M. et al. (2000) Extracellular K(+) and opening of voltage-gated potassium
	channels activate T cell integrin function: physical and functional association between
	Kv1.3 channels and beta1 integrins. <u>J Exp Med. 191: 1167-76.</u>
	6. Bass, R. et al. (2005) Regulation of urokinase receptor proteolytic function by the
	tetraspanin CD82. <u>J Biol Chem. 280: 14811-8.</u>
	7. Clark, K. et al. (2000) Production of recombinant soluble human integrin alpha4beta1.
	FEBS Lett. 471: 182-6.
	8. Papageorgiou, I. et al. (2014) Interaction of micron and nano-sized particles with cells
	of the dura mater. J Biomed Mater Res B Appl Biomater. 102 (7): 1496-505.
	9. Takaki, T. (2006) Interferon-gamma inhibits collagen phagocytosis in human fibroblasts
	by inducing subcortical actin assembly and reducing ability of beta1 integrin to bind to collagen. Inflamm Res. 55: 534-42.
	10. Eirin A et al. (2017) Integrated transcriptomic and proteomic analysis of the molecular
	cargo of extracellular vesicles derived from porcine adipose tissue-derived mesenchymal
	stem cells. PLoS One. 12 (3): e0174303.
	11. Meng, Y. et al. (2018) The metabolic syndrome alters the miRNA signature of porcine
	adipose tissue-derived mesenchymal stem cells. Cytometry A. 93 (1): 93-103.
	12. Dawson, H.D. and Lunney, J.K. (2018) Porcine cluster of differentiation (CD) markers
	2018 update. <u>Res Vet Sci. 118: 199-246.</u>
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.
Guarantee	12 months from date of despatch
Health And Safety	Material Safety Datasheet documentation #10040 available at:
Information	10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77)	<u>HRP</u>			
Rabbit Anti Mouse IgG (STAR12)	<u>RPE</u>			
Rabbit Anti Mouse IgG (STAR8)	DyLight®800			
Goat Anti Mouse IgG (STAR76)	<u>RPE</u>			
Human Anti Mouse IgG2a (HCA037)	<u>HRP</u>			
Goat Anti Mouse IgG (Fc) (STAR120)	<u>FITC, HRP</u>			
Goat Anti Mouse IgG IgA IgM (STAR87) <u>Alk. Phos.</u> , <u>HRP</u>				
Rabbit Anti Mouse IgG (STAR13)	<u>HRP</u>			
Goat Anti Mouse IgG (STAR70)	<u>FITC</u>			

Rabbit Anti Mouse IgG (STAR9...)

FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA929)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-ra	ad.com	Email: antibody_sales_uk@bio-ra	d.com	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 'M382955:210513'

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