

Datasheet: MCA1189

Description:	MOUSE ANTI HUMAN CD29
Specificity:	CD29
Other names:	INTEGRIN BETA 1 CHAIN
Format:	Ig Fraction
Product Type:	Monoclonal Antibody
Clone:	JB1B
Isotype:	IgG2a
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 www.bio-rad-antibodies.com/protocols.

	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 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.

Target Species

Human

Species Cross Reactivity

Reacts with: Pig, Cynomolgus monkey, Rhesus Monkey

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 further information.

Product Form

Purified IgG - liquid

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	<p>UniProt: P05556 Related reagents</p> <p>Entrez Gene: 3688 ITGB1 Related reagents</p>
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	<p>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 VWFA domain. Specificity for CD29 has been confirmed with integrin beta1 transfectants and by reciprocal preclearing of beta1 reactivity with anti-beta1 antibody.</p> <p>Mouse anti Human CD29 antibody, clone JB1B has been successfully employed for the detection of porcine CD29 in formalin fixed, paraffin embedded material (Papageorgiou et al. 2014) and also to stimulate the adherence of several cell types (Wilkins et al. 1996).</p> <p>The removal of azide is recommended prior to use in functional assays.</p>
References	<ol style="list-style-type: none"> 1. Stupack, D.G. <i>et al.</i> (1994) Control of lymphocyte integrin function: evidence for multiple contributing factors. Cell Immunol. 155 (1): 237-45. 2. Wilkins, J.A. <i>et al.</i> (1996) Control of beta1 integrin function. Localization of stimulatory epitopes. J Biol Chem. 271 (6): 3046-51. 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. Batista da Silva, A.P. <i>et al.</i> (2004) The major outer sheath protein of <i>Treponema denticola</i> inhibits the binding step of collagen phagocytosis in fibroblasts. Cell Microbiol. 6:

[485-98.](#)

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. [J Exp Med. 191: 1167-76.](#)
6. Bass, R. *et al.* (2005) Regulation of urokinase receptor proteolytic function by the tetraspanin CD82. [J Biol Chem. 280: 14811-8.](#)
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. [Res Vet Sci. 118: 199-246.](#)

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.
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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
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

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

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 \(MCA929\)](#)

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

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