

Datasheet: MCA1187

Description:	MOUSE ANTI HUMAN CD49e
Specificity:	CD49e
Other names:	INTEGRIN ALPHA 5 CHAIN, VLA-5
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	JBS5
Isotype:	IgG1
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	▪			Neat - 1/10
Immunohistology - Frozen	▪			0.5ug/ml - 1ug/ml
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			1ug/ml - 5ug/ml
Western Blotting			▪	
Functional Assays (1)	▪			

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.

(1)This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays

Target Species

Human

Species Cross Reactivity

Reacts with: Dog, Rabbit

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.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	Ig concentration 0.5 mg/ml
External Database Links	<p>UniProt: P08648 Related reagents</p> <p>Entrez Gene: 3678 ITGA5 Related reagents</p>
Synonyms	FNRA
RRID	AB_2128002
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 CD49e antibody, clone JBS5 recognizes the Alpha 5 integrin, also known as CD49e, VLA-5, Fibronectin receptor subunit alpha or Integrin alpha-F. CD49e is a 1049 amino acid ~130kDa single pass type-1 transmembrane glycoprotein containing seven FG-GAP repeats. Mouse anti human CD49e antibody, clone JBS5 been shown to stimulate homotypic cellular aggregation of alpha 5 beta 1 positive lymphoid cell lines (Shen <i>et al.</i> 1991). It also inhibits the adherence of cells to fibronectin.</p> <p>Removal of sodium azide is recommended prior to use in functional assays.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul of whole blood.
Histology Positive Control Tissue	Human Endothelium
References	<ol style="list-style-type: none"> Shen, C.X. <i>et al.</i> (1991) Antibodies to different members of the beta 1 (CD29) integrins induce homotypic and heterotypic cellular aggregation. Cell Immunol. 138 (1): 216-28. McCarty, O.J. <i>et al.</i> (2004) Evaluation of the role of platelet integrins in fibronectin-dependent spreading and adhesion. J Thromb Haemost. 2 (10): 1823-33. Bax, D.V. <i>et al.</i> (2004) Integrin alpha5beta1 and ADAM-17 interact <i>in vitro</i> and co-localize in migrating HeLa cells. J Biol Chem. 279 (21): 22377-86. Gassmann, P. <i>et al.</i> (2009) CXCR4 regulates the early extravasation of metastatic tumor cells <i>in vivo</i>. Neoplasia. 11: 651-61. Yao, H. <i>et al.</i> (2010) Increased potency of the PHSCN dendrimer as an inhibitor of human prostate cancer cell invasion, extravasation, and lung colony formation. Clin Exp Metastasis 27:173-84.

6. Gassmann, P. *et al* (2010) In vivo tumor cell adhesion in the pulmonary microvasculature is exclusively mediated by tumor cell--endothelial cell interaction. [BMC Cancer. 10: 177.](#)
7. Schuberth, H-J.*et al.* (2007) Reactivity of cross-reacting monoclonal antibodies with canine leukocytes, platelets and erythrocytes. [Vet Immunol Immunopathol. 119 \(1-2\): 47-55.](#)
8. Piccinno, M.S. *et al.* (2013) Adipose stromal/stem cells assist fat transplantation reducing necrosis and increasing graft performance. [Apoptosis. 18 \(10\): 1274-89.](#)
9. Veine, D.M. *et al.* (2014) A D-amino acid containing peptide as a potent, noncovalent inhibitor of $\alpha 5\beta 1$ integrin in human prostate cancer invasion and lung colonization. [Clin Exp Metastasis. 31 \(4\): 379-93.](#)

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. 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

Health And Safety Information Material Safety Datasheet documentation #10040 available at: 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...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@680 , DyLight@800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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