

Datasheet: MCA1585
BATCH NUMBER 1709

Description:	MOUSE ANTI HUMAN INTEGRIN ALPHA 9 BETA 1		
Specificity:	INTEGRIN ALPHA 9 BETA 1		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	Y9A2		
Isotype:	lgG1		
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				
Immunohistology - Frozen		•		
Immunohistology - Paraffin		•		
Immunohistology - Resin		•		
ELISA			•	
Immunoprecipitation				
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. 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, Guinea Pig  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
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	alpha9 integrin transfected lambda cells.
External Database Links	UniProt:  Q13797 Related reagents  Entrez Gene:  3680 ITGA9 Related reagents
RRID	AB_322166
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	Mouse anti Human Integrin alpha 9 beta 1 antibody, clone Y9A2 recognizes the human alpha9 integrin, a ~140 kDa glycoprotein expressed as a heterodimer in association with the beta1 integrin. The alpha9 integrin is expressed by epithelial cells, including airway epithelial cells.
	Mouse anti Human Integrin alpha 9 beta 1 antibody, clone Y9A2 inhibits adhesion of alpha9 expressing cells to N-terminal osteopontin. Mouse anti Human Integrin alpha 9 beta 1 antibody, clone Y9A2 has been shown to cause 100% inhibition of $\alpha$ 9 $\beta$ 1-mediated adhesion to the third fibronectin type III repeat in tenascin at <10ug/ml (Yokosaki <i>et al.</i> 1998) and demonstrates Itg $\alpha$ 9 blocking of progenitor cell proliferation (Schreiber <i>et al.</i> 2009).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	1. Wang, A. <i>et al.</i> (1996) Differential regulation of airway epithelial integrins by growth factors. Am J Respir Cell Mol Biol. 15 (5): 664-72.  2. Smith, L.L. <i>et al.</i> (1996) Osteopontin N-terminal domain contains a cryptic adhesive sequence recognized by alpha9beta1 integrin. J Biol Chem. 271 (45): 28485-91.  3. Yokosaki, Y. <i>et al.</i> (1996) Differential effects of the integrins alpha9beta1, alphavbeta3, and alphavbeta6 on cell proliferative responses to tenascin. Roles of the beta subunit extracellular and cytoplasmic domains. J Biol Chem. 271 (39): 24144-50.  4. Sime, W. <i>et al.</i> (2009) Human mast cells adhere to and migrate on epithelial and vascular basement membrane laminins LM-332 and LM-511 via alpha3beta1 integrin. J Immunol. 183 (7): 4657-65.

Storage Store at +4°C for one month or at -20°C for longer.

This product should be stored undiluted. 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 Material Safety Datasheet documentation #10040 available at:

<a href="https://www.bio-rad-antibodies.com/SDS/MCA1585">https://www.bio-rad-antibodies.com/SDS/MCA1585</a>
10040

Regulatory For research purposes only

## Related Products

# **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...) **RPE** Goat Anti Mouse IgG IgA IgM (STAR87...) HRP Goat Anti Mouse IgG (STAR76...) **RPE** Goat Anti Mouse IgG (STAR70...) **FITC** Rabbit Anti Mouse IgG (STAR13...) **HRP** Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP Rabbit Anti Mouse IgG (STAR9...) **FITC** Goat Anti Mouse IgG (STAR77...) **HRP** 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 IgG1 NEGATIVE CONTROL (MCA928)

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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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