

Datasheet: MCA1585T BATCH NUMBER 159605

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:	25 μg

## **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_2128461
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 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 Information

Material Safety Datasheet documentation #10040 available at:

https://www.bio-rad-antibodies.com/SDS/MCA1585T

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**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...) <u>FITC</u>

Rabbit Anti Mouse IgG (STAR13...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) <u>FITC</u>

Goat Anti Mouse IgG (STAR77...) HRP

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

<u>DyLight®650</u>, <u>DyLight®680</u>, <u>DyLight®800</u>,

FITC, HRP

## **Recommended Negative Controls**

### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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 Fax: +44 (0)1865 852 739
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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 'M390202:210825'

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