

# Datasheet: MCA1457GA

**BATCH NUMBER 1801**

<b>Description:</b>	MOUSE ANTI HUMAN CD49f
<b>Specificity:</b>	CD49f
<b>Other names:</b>	INTEGRIN ALPHA 6 CHAIN, VLA-6
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	450-30A
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10 - 1/50
Immunohistology - Frozen (1)	▪			1/50 - 1/100
Immunohistology - Paraffin		▪		
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. 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)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G 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	alpha 6 beta 4 integrin purified from A431 cells.
External Database Links	<p><b>UniProt:</b>  <a href="#">P23229</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3655</a>    ITGA6    <a href="#">Related reagents</a></p>
RRID	AB_324600
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	<p><b>Mouse anti Human CD49f antibody, clone 450-30A</b> recognizes the human VLA-6 cell surface antigen, also known as the alpha 6 integrin and as CD49f.</p> <p>CD49f is expressed by platelets, weakly by monocytes and by a subset of lymphocytes.</p> <p>CD49f is also widely expressed on epithelial tissues.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
Histology Positive Control Tissue	Tonsil
References	<ol style="list-style-type: none"> <li>1. Kennel, S.J. <i>et al.</i> (1990) Second generation monoclonal antibodies to the human integrin alpha 6 beta 4. <a href="#">Hybridoma. 9 (3): 243-55.</a></li> <li>2. Maurice, S. <i>et al.</i> (2007) Isolation of progenitor cells from cord blood using adhesion matrices. <a href="#">Cytotechnology. 54: 121-33.</a></li> <li>3. Cavers, M. <i>et al.</i> (2002) Differential expression of beta1 and beta2 integrins and L-selectin on CD4+ and CD8+ T lymphocytes in human blood: comparative analysis between isolated cells, whole blood samples and cryopreserved preparations. <a href="#">Clin Exp Immunol. 127: 60-5.</a></li> <li>4. López, J. <i>et al.</i> (2012) Cancer-initiating cells derived from established cervical cell lines exhibit stem-cell markers and increased radioresistance. <a href="#">BMC Cancer. 12: 48.</a></li> <li>5. Keller, P.J. <i>et al.</i> (2012) Defining the cellular precursors to human breast cancer. <a href="#">Proc Natl Acad Sci U S A. 109: 2772-7.</a></li> <li>6. Kaczmarek, M. <i>et al.</i> (2011) Evaluation of the phenotype pattern of macrophages</li> </ol>

- isolated from malignant and non-malignant pleural effusions. [Tumour Biol. 32: 1123-32.](#)
7. Aldridge, V. *et al.* (2012) Human mesenchymal stem cells are recruited to injured liver in a  $\beta$ 1-integrin and CD44 dependent manner. [Hepatology. 56 \(3\): 1063-73.](#)
8. Steinberg, F. *et al.* (2012) SNX17 protects integrins from degradation by sorting between lysosomal and recycling pathways. [J Cell Biol. 197 \(2\): 219-30.](#)
9. Liu, L. *et al.* (2003) Priming of eosinophil migration across lung epithelial cell monolayers and upregulation of CD11b/CD18 are elicited by extracellular  $Ca^{2+}$ . [Am J Respir Cell Mol Biol. 28: 713-21.](#)
10. Goyer, B. *et al.* (2017) Extracellular matrix and integrin expression profiles in Fuchs endothelial corneal dystrophy cells and tissue model. [Tissue Eng Part A. Jul 20 \[Epub ahead of print\].](#)

<b>Storage</b>	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.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1457GA">https://www.bio-rad-antibodies.com/SDS/MCA1457GA</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

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

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a> 'M365346:200529'	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

**Printed on 23 May 2025**

---

© 2025 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)