

Datasheet: MCA1457T

Description:	MOUSE ANTI HUMAN CD49f
Specificity:	CD49f
Other names:	INTEGRIN ALPHA 6 CHAIN, VLA-6
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	450-30A
Isotype:	IgG1
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 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 product 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 product 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.

Target Species	Human
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 (NaN ₃)
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>UniProt: P23229 Related reagents</p> <p>Entrez Gene: 3655 ITGA6 Related reagents</p>
RRID	AB_2128304
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	<p>Mouse anti Human CD49f antibody, clone 450-30A 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 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
Histology Positive Control Tissue	Human tonsil
References	<ol style="list-style-type: none"> Kennel, S.J. <i>et al.</i> (1990) Second generation monoclonal antibodies to the human integrin alpha 6 beta 4. Hybridoma. 9 (3): 243-55. 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. Clin Exp Immunol. 127: 60-5. Liu, L. <i>et al.</i> (2003) Priming of eosinophil migration across lung epithelial cell monolayers and upregulation of CD11b/CD18 are elicited by extracellular Ca²⁺. Am J Respir Cell Mol Biol. 28: 713-21. Maurice, S. <i>et al.</i> (2007) Isolation of progenitor cells from cord blood using adhesion matrices. Cytotechnology. 54: 121-33. Kaczmarek, M. <i>et al.</i> (2011) Evaluation of the phenotype pattern of macrophages isolated from malignant and non-malignant pleural effusions. Tumour Biol. 32: 1123-32. López, J. <i>et al.</i> (2012) Cancer-initiating cells derived from established cervical cell lines exhibit stem-cell markers and increased radioresistance. BMC Cancer. 12: 48.

7. Keller, P.J. *et al.* (2012) Defining the cellular precursors to human breast cancer. [Proc Natl Acad Sci U S A. 109: 2772-7.](#)
8. Aldridge, V. *et al.* (2012) Human mesenchymal stem cells are recruited to injured liver in a β 1-integrin and CD44 dependent manner. [Hepatology. 56 \(3\): 1063-73.](#)
9. Steinberg, F. *et al.* (2012) SNX17 protects integrins from degradation by sorting between lysosomal and recycling pathways. [J Cell Biol. 197 \(2\): 219-30.](#)
10. Goyer, B. *et al.* (2018) Extracellular Matrix and Integrin Expression Profiles in Fuchs Endothelial Corneal Dystrophy Cells and Tissue Model. [Tissue Eng Part A. 24 \(7-8\): 607-15.](#)
11. Amirian, M. *et al.* (2022) VASA protein and gene expression analysis of human non-obstructive azoospermia and normal by immunohistochemistry, immunocytochemistry, and bioinformatics analysis. [Sci Rep. 12 \(1\): 17259.](#)
12. Hashemi Karoii, D. *et al.* (2023) Altered G-Protein Transduction Protein Gene Expression in the Testis of Infertile Patients with Nonobstructive Azoospermia. [DNA Cell Biol. 42 \(10\): 617-37.](#)

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/MCA1457T>
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](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#), [DyLight®650](#), [DyLight®680](#), [DyLight®800](#), [FITC](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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

'M422007:230822'

Printed on 18 Jan 2024

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