

Datasheet: MCA1133GT

Description:	MOUSE ANTI HUMAN CD49a
Specificity:	CD49a
Other names:	INTEGRIN ALPHA 1 CHAIN, VLA-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	TS2/7
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	▪			1/25 - 1/50
Immunohistology - Frozen	▪			
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.

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	Human CTL line directed against HLA-DR.
External Database Links	<p>UniProt: P56199 Related reagents</p> <p>Entrez Gene: 3672 ITGA1 Related reagents</p>
RRID	AB_1102114
Fusion Partners	Spleen cells from immunized Balb.c mice were fused with cells of the NS1 mouse myeloma.
Specificity	<p>Mouse anti Human CD49a antibody, clone TS2/7 recognizes the human alpha 1 integrin sub-unit, which forms the VLA-1 heterodimer in association with the beta 1 integrin. VLA-1 is a receptor for collagen and laminin, and is expressed by chronically activated T cells, melanoma cells and smooth muscle cells.</p> <p>Mouse anti Human CD49a antibody, clone TS2/7 has been reported as being suitable for use in Western Blotting.</p> <p>Mouse anti Human CD49a antibody, clone TS2/7 is routinely tested in flow cytometry using HeLa cells.</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl.
References	<ol style="list-style-type: none"> 1. Hemler, M.E. <i>et al.</i> (1985) Biochemical characterization of VLA-1 and VLA-2. Cell surface heterodimers on activated T cells. J Biol Chem. 260 (28): 15246-52. 2. Hafler, D.A. <i>et al.</i> (1985) Investigation of in vivo activated T cells in multiple sclerosis and inflammatory central nervous system diseases. Clin Immunol Immunopathol. 37 (2): 163-71. 3. Klemmt, P.A. <i>et al.</i> (2007) Endometrial cells from women with endometriosis have increased adhesion and proliferative capacity in response to extracellular matrix components: towards a mechanistic model for endometriosis progression. Hum Reprod. 22: 3139-47. 4. Berry, P.A. <i>et al.</i> (2011) The calcium sensor STIM1 is regulated by androgens in prostate stromal cells. Prostate. 71: 1646-55. 5. Elshaw, S.R. <i>et al.</i> (2001) A comparison of ocular melanocyte and uveal melanoma cell invasion and the implication of alpha1beta1, alpha4beta1 and alpha6beta1 integrins. Br J Ophthalmol. 85: 732-8. 6. Cervar-Zivkovic, M. <i>et al.</i> (2011) Endothelin-1 Stimulates Proliferation of First-Trimester Trophoblasts via the A- and B-Type Receptor and Invasion via the B-Type Receptor. J Clin

[Endocrinol Metab. 96: 3408-15.](#)

7. Kaneko, Y. *et al.* (2012) Integrin $\alpha 1/\beta 1$ and $\alpha 2/\beta 1$ as a receptor for IgA1 in human glomerular mesangial cells in IgA nephropathy. [Int Immunol. 24: 219-32.](#)

8. Majali-Martinez, A. *et al.* (2018) Temporal changes of the endothelin system in human cytotrophoblasts during the first trimester of pregnancy. [Physiol Res. 67 \(Suppl 1\): S247-S255.](#)

9. Zhuang, L. *et al.* (2021) Dermal Pericytes Exhibit Declined Ability to Promote Human Skin Regeneration with Ageing in 3D Organotypic Culture Models [Cells. 10 \(11\): 3051.](#)

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/MCA1133GT>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
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](#)

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](https://www.bio-rad-antibodies.com/datasheets)

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