

## Datasheet: MCA1133G

<b>Description:</b>	MOUSE ANTI HUMAN CD49a
<b>Specificity:</b>	CD49a
<b>Other names:</b>	INTEGRIN ALPHA 1 CHAIN, VLA-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	TS2/7
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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 [www.bio-rad-antibodies.com/protocols](http://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 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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Human CTL line directed against HLA-DR.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P56199</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3672</a>    ITGA1    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_566785
<b>Fusion Partners</b>	Spleen cells from immunized Balb.c mice were fused with cells of the NS1 mouse myeloma.
<b>Specificity</b>	<p><b>Mouse anti Human CD49a antibody, clone TS2/7</b> 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>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl.
<b>References</b>	<ol style="list-style-type: none"> <li>Hemler, M.E. <i>et al.</i> (1985) Biochemical characterization of VLA-1 and VLA-2. Cell surface heterodimers on activated T cells. <a href="#">J Biol Chem. 260 (28): 15246-52.</a></li> <li>Hafler, D.A. <i>et al.</i> (1985) Investigation of in vivo activated T cells in multiple sclerosis and inflammatory central nervous system diseases. <a href="#">Clin Immunol Immunopathol. 37 (2): 163-71.</a></li> <li>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. <a href="#">Hum Reprod. 22: 3139-47.</a></li> <li>Berry, P.A. <i>et al.</i> (2011) The calcium sensor STIM1 is regulated by androgens in prostate stromal cells. <a href="#">Prostate. 71: 1646-55.</a></li> <li>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. <a href="#">Br J Ophthalmol. 85: 732-8.</a></li> <li>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. <a href="#">J Clin</a></li> </ol>

[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.](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1133G>  
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**Regulatory** For research purposes only

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## 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 \(MCA928\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

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**Europe**

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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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