

Datasheet: MCA1133G

BATCH NUMBER 155087

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:	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.

	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

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_566785
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 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Hemler, M.E. <i>et al.</i> (1984) Glycoproteins of 210,000 and 130,000 m.w. on activated T cells: cell distribution and antigenic relation to components on resting cells and T cell lines. J Immunol. 132 (6): 3011-8. 2. 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. 3. 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. 4. 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. 5. Berry, P.A. <i>et al.</i> (2011) The calcium sensor STIM1 is regulated by androgens in prostate stromal cells. Prostate. 71: 1646-55. 6. 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.](#)

7. Cervar-Zivkovic, M. *et al.* (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.](#)

8. 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.](#)

Storage

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.

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/MCA1133G>
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 \(MCA928\)](#)

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