

Datasheet: MCA1133F

Description:	MOUSE ANTI HUMAN CD49a:FITC
Specificity:	CD49a
Other names:	INTEGRIN ALPHA 1 CHAIN, VLA-1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	TS2/7
Isotype:	IgG1
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			Neat - 1/5

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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		
Immunogen	Human CTL line directed against HLA-DR.		
External Database Links	UniProt:		
	P56199	Related reagents	

Entrez Gene:

[3672](#) ITGA1 [Related reagents](#)

Fusion Partners	Spleen cells from immunized Balb.c mice were fused with cells of the NS1 mouse myeloma.
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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>
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Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
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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. <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: 3408-15.8. Kaneko, Y. <i>et al.</i> (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.
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Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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Shelf Life	18 months from date of despatch.
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Health And Safety	Material Safety Datasheet documentation #10041 available at:
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Information 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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