

## Datasheet: MCA1133A647T

<b>Description:</b>	MOUSE ANTI HUMAN CD49a:Alexa Fluor® 647
<b>Specificity:</b>	CD49a
<b>Other names:</b>	INTEGRIN ALPHA 1 CHAIN, VLA-1
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	TS2/7
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	25 TESTS/0.25ml

## 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	■			Neat - 1/10

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.

<b>Target Species</b>	Human		
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	Alexa Fluor®647	650	665
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml		
<b>Immunogen</b>	Human CTL line directed against HLA-DR.		
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P56199</a> <a href="#">Related reagents</a>		

**Entrez Gene:**

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

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<b>Fusion Partners</b>	Spleen cells from immunized Balb.c mice were fused with cells of the NS1 mouse myeloma.
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<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>
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
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<b>References</b>	<ol style="list-style-type: none"><li>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. <a href="#">J Immunol. 132 (6): 3011-8.</a></li><li>2. 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>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. <a href="#">Clin Immunol Immunopathol. 37 (2): 163-71.</a></li><li>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. <a href="#">Hum Reprod. 22: 3139-47.</a></li><li>5. 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>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. <a href="#">Br J Ophthalmol. 85: 732-8.</a></li><li>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. <a href="#">J Clin Endocrinol Metab. 96: 3408-15.</a></li><li>8. Kaneko, Y. <i>et al.</i> (2012) Integrin <math>\alpha 1/\beta 1</math> and <math>\alpha 2/\beta 1</math> as a receptor for IgA1 in human glomerular mesangial cells in IgA nephropathy. <a href="#">Int Immunol. 24: 219-32.</a></li></ol>
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<b>Storage</b>	<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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<b>Shelf Life</b>	18 months from date of despatch.
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<b>Acknowledgements</b>	This product is provided under an intellectual property licence from Life Technologies Corporation.
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**Health And Safety Information**      Material Safety Datasheet documentation #10041 available at:  
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory**                      For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

### Recommended Useful Reagents

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

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

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

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