

## Datasheet: MCA1368G

**BATCH NUMBER 150004**

<b>Description:</b>	RAT ANTI MOUSE CD11a
<b>Specificity:</b>	CD11a
<b>Other names:</b>	INTEGRIN ALPHA L CHAIN, LFA-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	I21/7
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.25 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	▪			
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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<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 Stabilisers</b>	0.09% Sodium Azide

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Whole BW5147 cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P24063</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">16408</a> Itgal    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Lfa-1, Ly-15
<b>Specificity</b>	<p><b>Rat anti Mouse CD11a antibody, clone I21/7</b> recognizes murine CD11a, a ~170-180 kDa type I membrane glycoprotein, also known as the integrin alpha L subunit. CD11a is a member of the integrin family of adhesion molecules. CD11a is expressed on all leucocytes and associates with CD18 to form a heterodimer at the cell surface. The CD11a/CD18 heterodimer binds to intercellular adhesion molecules (ICAM); ICAM1, ICAM-2 and ICAM-3 and is involved in cell-cell adhesion processes.</p> <p>Rat anti Mouse CD11a antibody, clone I21/7 is reported to block the cytolytic activity of cytotoxic T cell lines (<a href="#">Trowbridge and Omary 1981</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Talento, A. <i>et al.</i> (1993) A single administration of LFA-1 antibody confers prolonged allograft survival. <a href="#">Transplantation. 55 (2): 418-22.</a></li> <li>2. Campbell, S.B. <i>et al.</i> (2001) CD4 ligation promotes the IL-4-independent development of IL-4-producing clones from naive CD4(+) T cells. <a href="#">J Immunol. 167 (10): 5610-9.</a></li> <li>3. Kleinschnitz, C. <i>et al.</i> (2013) Regulatory T cells are strong promoters of acute ischemic stroke in mice by inducing dysfunction of the cerebral microvasculature. <a href="#">Blood. 121: 679-691</a></li> <li>4. Falanga, P.B. &amp; Butcher, E.C. (1991) Late treatment with anti-LFA-1 (CD11a) antibody prevents cerebral malaria in a mouse model. <a href="#">Eur J Immunol. 21 (9): 2259-63.</a></li> <li>5. Chiu, W.C. <i>et al.</i> (2007) Effect of dietary fish oil supplementation on cellular adhesion molecule expression and tissue myeloperoxidase activity in diabetic mice with sepsis. <a href="#">Br J Nutr. 97 (4): 685-91.</a></li> <li>6. Xumei, H. <i>et al.</i> (2020) Mesenchymal stem cell-derived exosomal microRNA-34c-5p ameliorates renal pericyte activation by inhibiting core fucosylation [preprint]. <a href="#">Nov 13. [Epub ahead of print].</a></li> </ol>
<b>Further Reading</b>	<ol style="list-style-type: none"> <li>1. Springer, T.A. <i>et al.</i> (1982) LFA-1 and Lyt-2,3, molecules associated with T lymphocyte-mediated killing; and Mac-1, an LFA-1 homologue associated with complement receptor function. <a href="#">Immunol Rev. 68: 171-95.</a></li> </ol>

**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.

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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/MCA1368G>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

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

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

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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)  
'M365212:200529'

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