

Datasheet: MCA1368G

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

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
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.

Target Species	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN ₃)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Whole BW5147 cells.
External Database Links	<p>UniProt: P24063 Related reagents</p> <p>Entrez Gene: 16408 Itgal Related reagents</p>
Synonyms	Lfa-1, Ly-15
Specificity	<p>Rat anti Mouse CD11a antibody, clone I21/7 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 (Trowbridge and Omary 1981).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> 1. Falanga, P.B. & Butcher, E.C. (1991) Late treatment with anti-LFA-1 (CD11a) antibody prevents cerebral malaria in a mouse model. Eur J Immunol. 21 (9): 2259-63. 2. Talento, A. <i>et al.</i> (1993) A single administration of LFA-1 antibody confers prolonged allograft survival. Transplantation. 55 (2): 418-22. 3. 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. J Immunol. 167 (10): 5610-9. 4. 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. Br J Nutr. 97 (4): 685-91. 5. 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. Blood. 121: 679-691 6. Xuemei, H. <i>et al.</i> (2020) Mesenchymal stem cell-derived exosomal microRNA-34c-5p ameliorates renal pericyte activation by inhibiting core fucosylation Res Sq 13 Oct [Epub ahead of print]. 7. Hu, X. <i>et al.</i> (2021) Bone marrow mesenchymal stem cell-derived exosomal miR-34c-5p ameliorates RIF by inhibiting the core fucosylation of multiple proteins. Mol Ther. S1525-0016(21)00519-0.
Further Reading	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. [Immunol Rev. 68: 171-95.](#)

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.

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/MCA1368G>
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Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight@550 , DyLight@650 , DyLight@800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight@800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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)
'M409393:221018'

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