

Datasheet: MCA1368EL

Description:	RAT ANTI MOUSE CD11a:Low Endotoxin
Specificity:	CD11a
Other names:	INTEGRIN ALPHA L CHAIN, LFA-1
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	I21/7
Isotype:	IgG2a
Quantity:	0.5 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	▪			1/10 - 1/50
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Functional Assays	▪			

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	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	None present
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Whole BW5147 cells.
External Database	UniProt:

Links

[P24063](#) [Related reagents](#)

Entrez Gene:

[16408](#) Itgal [Related reagents](#)

Synonyms

Lfa-1, Ly-15

Specificity

Rat anti Mouse CD11a antibody, clone I21/7 recognizes murine CD11a, a ~170-180kDa type I membrane glycoprotein, also known as the integrin alpha L subunit. CD11a is a member of the intergrin 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.

Rat anti Mouse CD11a antibody, clone I21/7 is reported to block the cytolytic activity of cytotoxic T cell lines ([Trowbridge and Omary 1981](#)).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References

1. Trowbridge, I.S. & Omary, M.B. (1981) Molecular complexity of leukocyte surface glycoproteins related to the macrophage differentiation antigen Mac-1. [J Exp Med. 154 \(5\): 1517-24.](#)
2. Champe, M. *et al.* (1995) Monoclonal antibodies that block the activity of leukocyte function-associated antigen 1 recognize three discrete epitopes in the inserted domain of CD11a. [J Biol Chem. 270 \(3\): 1388-94.](#)
3. Campbell, S.B. *et al.* (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. Talento, A. *et al.* (1993) A single administration of LFA-1 antibody confers prolonged allograft survival. [Transplantation. 55 \(2\): 418-22.](#)
5. Barrett, T.B. *et al.* (1991) CD40 signaling activates CD11a/CD18 (LFA-1)-mediated adhesion in B cells. [J Immunol. 146 \(6\): 1722-9.](#)
6. Kleinschnitz, C. *et al.* (2013) Regulatory T cells are strong promoters of acute ischemic stroke in mice by inducing dysfunction of the cerebral microvasculature. [Blood. 121: 679-691](#)
7. 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.](#)

Further Reading

1. Springer, T.A. *et al.* (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

Store at -20°C only.

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.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet Documentation #10162 available at: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®549 , DyLight®649 , DyLight®800
Rabbit Anti Rat IgG (STAR20...)	RPE
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC

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