

Datasheet: MCA2086

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| Description: | MOUSE ANTI HUMAN CD18 (ACTIVATION EPITOPE) |
| Specificity: | CD18 (ACTIVATION EPITOPE) |
| Other names: | INTEGRIN BETA 2 CHAIN |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | MEM-148 |
| Isotype: | IgG1 |
| Quantity: | 0.2 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 | ▪ | | | Non-reducing conditions |

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.

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| Target Species | Human |
| Product Form | Purified IgG - liquid |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G |
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | 0.09% Sodium Azide |
| Approx. Protein Concentrations | IgG concentration 1.0 mg/ml |
| Immunogen | Peripheral blood mononuclear cells. |
| External Database Links | UniProt: |

Entrez Gene:

[3689](#) ITGB2 [Related reagents](#)

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| Synonyms | CD18, MFI7 |
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| Specificity | Mouse anti Human CD18 (Activation Epitope) antibody, clone MEM-148 recognizes an epitope on the human CD18 molecule that is hidden in the CD11/CD18 heterodimer on resting cells. Clone MEM-148 binds very weakly to resting peripheral blood leukocytes and strongly to all leukocytes upon cellular activation. The epitope recognized by Mouse anti Human CD18 (Activation Epitope) antibody, clone MEM-148 is also exposed during dissociation of the CD11/CD18 by low pH. |
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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. Drbal, K. <i>et al.</i> (2001) A proteolytically truncated form of free CD18, the common chain of leukocyte integrins, as a novel marker of activated myeloid cells. Blood. 98 (5): 1561-6.2. Luissint, A.C. <i>et al.</i> (2008) JAM-L-mediated leukocyte adhesion to endothelial cells is regulated in cis by alpha4beta1 integrin activation. J Cell Biol. 183 (6): 1159-73.3. Feng, C. <i>et al.</i> (2011) Endogenous PMN sialidase activity exposes activation epitope on CD11b/CD18 which enhances its binding interaction with ICAM-1. J Leukoc Biol. 90: 313-21.4. Anogianaki, A. <i>et al.</i> (2007) Capsaicin an irritant anti-inflammatory compound. J Biol Regul Homeost Agents. 21: 1-4.5. Arthos, J. <i>et al.</i> (2008) HIV-1 envelope protein binds to and signals through integrin alpha4beta7, the gut mucosal homing receptor for peripheral T cells. Nat Immunol. 9: 301-9.6. Cairo, C.W. <i>et al.</i> (2006) Cytoskeletal regulation couples LFA-1 conformational changes to receptor lateral mobility and clustering. Immunity. 25: 297-308.7. Tang, X.Y. <i>et al.</i> (2008) Intercellular adhesion molecule-3 binding of integrin alphaL beta2 requires both extension and opening of the integrin headpiece. J Immunol. 180: 4793-804.8. Kudlová M. <i>et al.</i> (2007) Expression of an activated form of integrin beta2 chain CD18 in cardiac surgical operations. Acta Medica (Hradec Kralove). 50: 187-93.9. Solovjov, D.A. <i>et al.</i> (2005) Distinct roles for the alpha and beta subunits in the functions of integrin alphaMbeta2. J Biol Chem. 280: 1336-45.10. Ehrichtiou, D. <i>et al.</i> (2005) Dual function for a unique site within the beta2I domain of integrin alphaMbeta2. J Biol Chem. 280: 8324-31.11. Cheng, M. <i>et al.</i> (2007) Mutation of a conserved asparagine in the I-like domain promotes constitutively active integrins alphaLbeta2 and alphaIIb beta3. J Biol Chem. 282: 18225-32.12. Shi, M. <i>et al.</i> (2007) A structural hypothesis for the transition between bent and extended conformations of the leukocyte beta2 integrins. J Biol Chem. 282: 30198-206. |
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| 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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| Shelf Life | 18 months from date of despatch. |
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| Health And Safety Information | Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf |
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Related Products

Recommended Secondary Antibodies

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| Goat Anti Mouse IgG (STAR76...) | RPE |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | Alk. Phos. , HRP |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |
| Goat Anti Mouse IgG (STAR77...) | HRP |
| Rabbit Anti Mouse IgG (STAR12...) | RPE |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC , HRP |
| Rabbit Anti Mouse IgG (STAR8...) | DyLight@800 |
| Goat Anti Mouse IgG (STAR70...) | FITC |
| Rabbit Anti Mouse IgG (STAR13...) | HRP |
| Human Anti Mouse IgG1 (HCA036...) | HRP |
| Goat Anti Mouse IgG (H/L) (STAR117...) | Alk. Phos. , DyLight@488 , DyLight@549 , DyLight@649 , DyLight@680 , DyLight@800 , FITC , HRP |

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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| 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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