

Datasheet: MCA2461A647T

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| Description: | RAT ANTI MOUSE CD51:Alexa Fluor® 647 |
| Specificity: | CD51 |
| Other names: | INTEGRIN ALPHA V |
| Format: | ALEXA FLUOR® 647 |
| Product Type: | Monoclonal Antibody |
| Clone: | RMV-7 |
| Isotype: | IgG1 |
| Quantity: | 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.

| | Yes | No | Not Determined | Suggested Dilution |
|----------------|-----|----|----------------|--------------------|
| Flow Cytometry | ▪ | | | Neat |

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.

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| Target Species | Mouse | | |
| Product Form | Purified IgG conjugated to Alexa Fluor® 647 - liquid | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | Alexa Fluor®647 | 650 | 665 |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant. | | |
| Buffer Solution | Phosphate buffered saline | | |
| Preservative | 0.09% Sodium Azide | | |
| Stabilisers | 1% Bovine Serum Albumin | | |
| Approx. Protein Concentrations | IgG concentration 0.05mg/ml | | |
| Immunogen | Cultured LAK cells from Balb/c mice. | | |
| External Database Links | UniProt: | | |
| | P43406 | Related reagents | |

Entrez Gene:

[16410](#) Itgav [Related reagents](#)

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| Fusion Partners | Spleen cells from immunised SD rats were fused with the cells of the P3X.63Ag8.653 myeloma cell line. |
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| Specificity | <p>Rat anti Mouse CD51 antibody, clone RMV-7 recognizes murine CD51, a ~140 kDa alpha subunit of the vitronectin receptor, which is otherwise known as the integrin alpha v chain. CD51 can form heterodimers at the cell surface with a variety of beta integrins including CD29 and CD61.</p> <p>Heterodimers of CD51/CD61 function as a receptor for vitronectin, and a wide array of RGD-containing proteins including fibronectin, fibrinogen, von Willebrand factor, laminin, thrombospondin and osteopontin. CD51/CD61 is primarily expressed on myeloid cells and activated T-cells. Alpha-V integrins may play a role in embryo implantation, angiogenesis and wound healing.</p> <p>Rat anti Mouse CD51 antibody, clone RMV-7 has been reported to block binding of CD51 to vitronectin, fibronectin, and CD31 in some cell types, as well as blocking LAK cell cytotoxicity (Takahashi <i>et al.</i> 1990).</p> |
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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. Takahashi, K. <i>et al.</i> (1990) A murine very late activation antigen-like extracellular matrix receptor involved in CD2- and lymphocyte function-associated antigen-1-independent killer-target cell interaction. J Immunol. 145 (12): 4371-9.2. Piali, L. <i>et al.</i> (1995) CD31/PECAM-1 is a ligand for alpha v beta 3 integrin involved in adhesion of leukocytes to endothelium. J Cell Biol. 130 (2): 451-60.3. Cui R <i>et al.</i> (2007) Abrogation of the interaction between osteopontin and alphavbeta3 integrin reduces tumor growth of human lung cancer cells in mice. Lung Cancer. 57 (3): 302-10.4. Takahashi F <i>et al.</i> (2001) Role of osteopontin in the pathogenesis of bleomycin-induced pulmonary fibrosis. Am J Respir Cell Mol Biol. 24 (3): 264-71. |
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| Further Reading | <ol style="list-style-type: none">1. Henderson, N.C. <i>et al.</i> (2013) Targeting of αv integrin identifies a core molecular pathway that regulates fibrosis in several organs. Nat Med. 19 (12): 1617-24. |
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| Storage | <p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. 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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| Shelf Life | 18 months from date of despatch. |
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| Acknowledgements | <p>This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com</p> |
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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>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA1211A647\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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