

Datasheet: MCA2461A488

Description:	RAT ANTI MOUSE CD51:Alexa Fluor® 488
Specificity:	CD51
Other names:	INTEGRIN ALPHA V
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	RMV-7
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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.

Target Species	Mouse						
Product Form	Purified IgG - conjugated to Alexa Fluor®488 - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Alexa Fluor®488</td> <td>495</td> <td>519</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®488	495	519
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
Alexa Fluor®488	495	519					
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](#)

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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Health And Safety Information Material Safety Datasheet documentation available at:
Material Safety Datasheet Documentation #10041 available at:
<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® 488 \(MCA1211A488\)](#)

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America Fax: +1 919 878 3751

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