

Datasheet: MCA2461

Description:	RAT ANTI MOUSE CD51
Specificity:	CD51
Other names:	INTEGRIN ALPHA V
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RMV-7
Isotype:	IgG1
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	▪			1/25 - 1/100
Immunohistology - Frozen	▪			1/25 - 1/100
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 1.0mg/ml
Immunogen	Cultured LAK cells from Balb/c mice.
External Database Links	<p>UniProt: P43406 Related reagents</p> <p>Entrez Gene: 16410 Itgav Related reagents</p>
RRID	AB_931725
Fusion Partners	Spleen cells from immunized SD rats were fused with the cells of the P3X.63Ag8.653 myeloma cell line.
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>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
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. 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. 4. 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.
Further Reading	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.](#)

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/MCA2461 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

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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
'M383928:210513'

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