

Datasheet: MCA2461GA

BATCH NUMBER 151403

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|----------------------|---------------------|
| Description: | RAT ANTI MOUSE CD51 |
| Specificity: | CD51 |
| Other names: | INTEGRIN ALPHA V |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | RMV-7 |
| Isotype: | IgG1 |
| Quantity: | 0.1 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 - 1/100 |
| 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.

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|---------------------------------|--|
| 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_915190 |
| Fusion Partners | Spleen cells from immunised 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. 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. |
| Further Reading | 1. Henderson, N.C. <i>et al.</i> (2013) Targeting of α v integrin identifies a core molecular |

pathway that regulates fibrosis in several organs. [Nat Med. 19 \(12\): 1617-24.](#)

Storage Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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/MCA2461GA>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

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