

Datasheet: MCA771GT

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| Description: | RAT ANTI MOUSE Ly-6B.2 ALLOANTIGEN |
| Specificity: | Ly-6B.2 ALLOANTIGEN |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | 7/4 |
| Isotype: | IgG2a |
| Quantity: | 25 µg |

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 | ▪ | | | 1/50 - 1/100 |
| Immunohistology - Frozen | ▪ | | | |
| Immunohistology - Paraffin | ▪ | | | |
| ELISA | | | ▪ | |
| Immunoprecipitation | | | ▪ | |
| Western Blotting | ▪ | | | |
| Immunofluorescence | ▪ | | | |

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 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 |
| Carrier Free | Yes |

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| Approx. Protein Concentrations | IgG concentration 1.0 mg/ml |
| Immunogen | Cultured bone marrow cells |
| RRID | AB_1102794 |
| Fusion Partners | Spleen cells from AO rats were fused with cells from the Y3 Ag1.2.3 rat myeloma cell line. |
| Specificity | <p>Rat anti Mouse Ly-6B.2 monoclonal antibody, clone 7/4 recognizes the Ly-6B.2 antigen. Ly-6B.2 is a ~25-30 kDa GPI-anchored, heavily glycosylated protein expressed on neutrophils, inflammatory monocytes and some activated macrophages (Rosas <i>et al.</i> 2010). High levels of expression are seen in bone marrow, spleen, lung and lymph nodes. N-glycanase treatment of thioglycollate elicited peritoneal neutrophil lysates lowers the apparent molecular weight of Ly-6B.2 to ~15 kDa (Rosas <i>et al.</i> 2010).</p> <p>In common with other Ly-6 antigens Ly-6B.2 demonstrates a polymorphic expression on inbred mouse strains (Kimura <i>et al.</i> 1984). Rat anti mouse Ly-6B.2, clone 7/4 recognizes the Ly-6B.2 antigen in 129J; AKR; C57BL/6; C57BL/10; C58; DBA/2; NZB; NZW; SJL; MFI; Swiss (PO) Strains whilst A2G; A/Sn; ASW; BALB/c; C3H/HEH; CBA.T6T6 are negative or demonstrate very weak reactivity (Hirsch and Gordon 1982).</p> <p>Rat anti mouse Ly-6B.2 has been successfully used for the immunomagnetic depletion of neutrophils during the enrichment of primitive hematopoietic cells from bone marrow (Bertoncello <i>et al.</i> 1991) and the depletion of myeloid cells <i>in vivo</i> (Rosas <i>et al.</i> 2010).</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul. |
| References | <ol style="list-style-type: none"> Rosas, M. <i>et al.</i> (2010) The myeloid 7/4-antigen defines recently generated inflammatory macrophages and is synonymous with Ly-6B. J Leukoc Biol. 88 (1): 169-80. Gordon, S. <i>et al.</i> (1992) Antigen markers of macrophage differentiation in murine tissues. Curr Top Microbiol Immunol. 181: 1-37. Word, R.A. <i>et al.</i> (2005) Transgene insertion on mouse chromosome 6 impairs function of the uterine cervix and causes failure of parturition. Biol Reprod. 73 (5): 1046-56. Locke, L.W. (2009) A novel neutrophil-specific PET imaging agent: cFLFLFK-PEG-64Cu. J Nucl Med. 50: 790-7. Allam, R. <i>et al.</i> (2011) Cyclic Polypeptide and Aminoglycoside Antibiotics Trigger IL-1{beta} Secretion by Activating the NLRP3 Inflammasome. J Immunol. 186: 2714-8. Holt, R. <i>et al.</i> (2011) The Molecular Mechanisms of Cervical Ripening Differ between Term and Preterm Birth. Endocrinology. 152: 1036-46. Frossard, J.L. <i>et al.</i> (2011) Role of CCL-2, CCR-2 and CCR-4 in cerulein-induced acute pancreatitis and pancreatitis-associated lung injury. J Clin Pathol. 64: 387-93. McDonald, J.U. <i>et al.</i> (2011) <i>In vivo</i> functional analysis and genetic modification of in vitro-derived mouse neutrophils. FASEB J. 25: 1972-82. Larmonier, C.B. <i>et al.</i> (2011) NHE3 modulates the severity of colitis in IL-10-deficient mice. Am J Physiol Gastrointest Liver Physiol. 300: G998-G1009. Yellon, S.M. <i>et al.</i> (2011) Remodeling of the cervix and parturition in mice lacking the progesterone receptor B isoform. Biol Reprod. 85: 498-502. |

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| Storage | Store at +4°C. DO NOT FREEZE. This product should be stored undiluted. 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: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf |
| Regulatory | For research purposes only |

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR17...) [FITC](#)

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

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

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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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