

Datasheet: MCA771PEB

Description:	RAT ANTI MOUSE Ly-6B.2 ALLOANTIGEN:RPE
Specificity:	Ly-6B.2 ALLOANTIGEN
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	7/4
Isotype:	IgG2a
Quantity:	500 TESTS

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 - 1/10

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.

Target Species	Mouse						
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized						
Reconstitution	Reconstitute with 5.0ml distilled water						
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>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
RPE 488nm laser	496	578					
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 5% Sucrose						

Immunogen	Cultured bone marrow cells
RRID	AB_567163
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 et al. 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 et al.2010).</p> <p>In common with other Ly-6 antigens Ly-6B.2 demonstrates a polymorphic expression on inbred mouse strains (Kimura et al. 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 et al. 1991) and the depletion of myeloid cells <i>in vivo</i> (Rosas et al. 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. Nadeau, S. <i>et al.</i> (2011) Functional Recovery after Peripheral Nerve Injury is Dependent on the Pro-Inflammatory Cytokines IL-1{beta} and TNF: Implications for Neuropathic Pain. J Neurosci. 31: 12533-12542.

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Storage

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at: 20487: <https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA1212PE\)](#)

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