

Datasheet: MCA771A700

Description:	RAT ANTI MOUSE Ly-6B.2 ALLOANTIGEN:Alexa Fluor® 700
Specificity:	Ly-6B.2 ALLOANTIGEN
Format:	ALEXA FLUOR® 700
Product Type:	Monoclonal Antibody
Clone:	7/4
Isotype:	IgG2a
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 - 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 Alexa Fluor® 700 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®700	702	723
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 0.05 mg/ml		

Immunogen	Cultured bone marrow cells
RRID	AB_808675
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

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

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Material Safety Datasheet documentation #10041 available at:

Information 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 700 \(MCA1212A700\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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