

## Datasheet: MCA771A647T

<b>Description:</b>	RAT ANTI MOUSE Ly-6B.2 ALLOANTIGEN:Alexa Fluor® 647
<b>Specificity:</b>	Ly-6B.2 ALLOANTIGEN
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	7/4
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	25 TESTS/0.25ml

## 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](http://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.

<b>Target Species</b>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor® 647 - liquid						
<b>Max Ex/Em</b>	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Alexa Fluor®647</td> <td>650</td> <td>665</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®647	650	665
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
Alexa Fluor®647	650	665					
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
<b>Buffer Solution</b>	Phosphate buffered saline						
<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin						
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml						

<b>Immunogen</b>	Cultured bone marrow cells
<b>RRID</b>	AB_1102791
<b>Fusion Partners</b>	Spleen cells from AO rats were fused with cells from the Y3 Ag1.2.3 rat myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse Ly-6B.2 monoclonal antibody, clone 7/4</b> 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 (<a href="#">Rosas et al. 2010</a>). 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 (<a href="#">Rosas et al.2010</a>).</p> <p>In common with other Ly-6 antigens Ly-6B.2 demonstrates a <a href="#">polymorphic</a> expression on inbred mouse strains (<a href="#">Kimura et al. 1984</a>). 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 (<a href="#">Hirsch and Gordon 1982</a>).</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 (<a href="#">Bertoncello et al. 1991</a>) and the depletion of myeloid cells <i>in vivo</i> (<a href="#">Rosas et al. 2010</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>Rosas, M. <i>et al.</i> (2010) The myeloid 7/4-antigen defines recently generated inflammatory macrophages and is synonymous with Ly-6B. <a href="#">J Leukoc Biol. 88 (1): 169-80.</a></li> <li>Gordon, S. <i>et al.</i> (1992) Antigen markers of macrophage differentiation in murine tissues. <a href="#">Curr Top Microbiol Immunol. 181: 1-37.</a></li> <li>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. <a href="#">Biol Reprod. 73 (5): 1046-56.</a></li> <li>Locke, L.W. (2009) A novel neutrophil-specific PET imaging agent: cFLFLFK-PEG-64Cu. <a href="#">J Nucl Med. 50: 790-7.</a></li> <li>Allam, R. <i>et al.</i> (2011) Cyclic Polypeptide and Aminoglycoside Antibiotics Trigger IL-1{beta} Secretion by Activating the NLRP3 Inflammasome. <a href="#">J Immunol. 186: 2714-8.</a></li> <li>Holt, R. <i>et al.</i> (2011) The Molecular Mechanisms of Cervical Ripening Differ between Term and Preterm Birth. <a href="#">Endocrinology. 152: 1036-46.</a></li> <li>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. <a href="#">J Clin Pathol. 64: 387-93.</a></li> <li>McDonald, J.U. <i>et al.</i> (2011) <i>In vivo</i> functional analysis and genetic modification of in vitro-derived mouse neutrophils. <a href="#">FASEB J. 25: 1972-82.</a></li> <li>Larmonier, C.B. <i>et al.</i> (2011) NHE3 modulates the severity of colitis in IL-10-deficient mice. <a href="#">Am J Physiol Gastrointest Liver Physiol. 300: G998-G1009.</a></li> <li>Yellon, S.M. <i>et al.</i> (2011) Remodeling of the cervix and parturition in mice lacking the progesterone receptor B isoform. <a href="#">Biol Reprod. 85: 498-502.</a></li> <li>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. <a href="#">J Neurosci. 31: 12533-12542.</a></li> </ol>

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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.

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**Guarantee**

12 months from date of despatch

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

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA1212A647\)](#)

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'M368926:200529'

**Printed on 12 Feb 2021**

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