

## Datasheet: MCA2463A647T

<b>Description:</b>	RAT ANTI MOUSE CD86:Alexa Fluor® 647
<b>Specificity:</b>	CD86
<b>Other names:</b>	B7-2
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	PO3
<b>Isotype:</b>	IgG2b
<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	▪			

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 in 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>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	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</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml		

<b>Immunogen</b>	Mouse B-cell line, BCL1.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P42082</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">12524</a> Cd86    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_2074995
<b>Fusion Partners</b>	Spleen cells from immunized Sprague Dawley rats were fused with cells of the P3U1 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti mouse CD86 antibody, clone PO3</b> recognizes mouse CD86 (B7-2), a ~80 kDa cell surface glycoprotein, a member of the CD28/B7 family. In mouse CD86 is expressed at high levels on peripheral blood monocytes and dendritic cells, and at low levels on resting B and T-lymphocytes. Expression of CD86, on these cell populations, can be increased upon activation. CD86 has been identified, along with CD80 (B7-1), as a ligand for CD28 and cytotoxic T-lymphocyte antigen-4 (CTLA4). CD28 and CTLA4 are two receptors that have opposing functions in T-cell stimulation. Interaction of CD86 with CD28 promotes a number of T-cell activities, whereas the binding of CD86 to CTLA4 inhibits T-cell responses.</p> <p>Rat anti mouse CD86 antibody, clone PO3 has been reported to block some co-stimulatory functions of CD86 (<a href="#">Nakajima et al. 1997</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>Jin, L.P. <i>et al.</i> (2004) Adoptive transfer of paternal antigen-hyporesponsive T cells induces maternal tolerance to the allogeneic fetus in abortion-prone matings. <a href="#">J Immunol. 173 (6): 3612-9.</a></li> <li>Nozawa, K. <i>et al.</i> (2001) Preferential blockade of CD8(+) T cell responses by administration of anti-CD137 ligand monoclonal antibody results in differential effect on development of murine acute and chronic graft-versus-host diseases. <a href="#">J Immunol. 167 (9): 4981-6.</a></li> <li>Nakajima, A. <i>et al.</i> (1997) Requirement of CD28-CD86 co-stimulation in the interaction between antigen-primed T helper type 2 and B cells. <a href="#">Int Immunol. 9 (5): 637-44.</a></li> <li>Bedoret, D. <i>et al.</i> (2009) Lung interstitial macrophages alter dendritic cell functions to prevent airway allergy in mice. <a href="#">J Clin Invest. 119 (12): 3723-38.</a></li> <li>Legutko, A. <i>et al.</i> (2011) Sirtuin 1 Promotes Th2 Responses and Airway Allergy by Repressing Peroxisome Proliferator-Activated Receptor-<math>\gamma</math> Activity in Dendritic Cells. <a href="#">J Immunol. 187: 4517-29.</a></li> </ol>
<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p>

Avoid repeated freezing and thawing as this may denature the antibody. 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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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Printed on 22 Mar 2021**

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