

Datasheet: MCA2463A647T

**BATCH NUMBER 0215**

<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>	<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
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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</b>	IgG concentration 0.05 mg/ml						

## Concentrations

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**Immunogen** Mouse B-cell line, BCL1.

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## External Database Links

**UniProt:**

[P42082](#)    [Related reagents](#)

**Entrez Gene:**

[12524](#) Cd86    [Related reagents](#)

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**RRID** AB\_2074995

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**Fusion Partners** Spleen cells from immunized Sprague Dawley rats were fused with cells of the P3U1 myeloma cell line.

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## Specificity

**Rat anti mouse CD86 antibody, clone PO3** 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.

Rat anti mouse CD86 antibody, clone PO3 has been reported to block some co-stimulatory functions of CD86 ([Nakajima et al. 1997](#)).

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## Flow Cytometry

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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## References

1. Jin, L.P. *et al.* (2004) Adoptive transfer of paternal antigen-hyporesponsive T cells induces maternal tolerance to the allogeneic fetus in abortion-prone matings. [J Immunol. 173 \(6\): 3612-9.](#)
  2. Nozawa, K. *et al.* (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. [J Immunol. 167 \(9\): 4981-6.](#)
  3. Nakajima, A. *et al.* (1997) Requirement of CD28-CD86 co-stimulation in the interaction between antigen-primed T helper type 2 and B cells. [Int Immunol. 9 \(5\): 637-44.](#)
  4. Bedoret, D. *et al.* (2009) Lung interstitial macrophages alter dendritic cell functions to prevent airway allergy in mice. [J Clin Invest. 119 \(12\): 3723-38.](#)
  5. Legutko, A. *et al.* (2011) Sirtuin 1 Promotes Th2 Responses and Airway Allergy by Repressing Peroxisome Proliferator-Activated Receptor- $\gamma$  Activity in Dendritic Cells. [J Immunol. 187: 4517-29.](#)
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## Storage

Store at +4°C or at -20°C if preferred.  
Storage in frost-free freezers is not recommended.

This product should be stored undiluted. This product is photosensitive and should be protected from light.

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: <https://www.bio-rad-antibodies.com/SDS/MCA2463A647T>

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**Regulatory** For research purposes only

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**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

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'M366975:200529'

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