

# Datasheet: MCA2463PET

**BATCH NUMBER INN1707**

<b>Description:</b>	RAT ANTI MOUSE CD86:RPE
<b>Specificity:</b>	CD86
<b>Other names:</b>	B7-2
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	PO3
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	25 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](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 in their own system using appropriate negative/positive controls.

Target Species	Mouse		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute in 0.25 ml disilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein G supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		

5% Sucrose

Immunogen	Mouse B-cell line, BCL1.
External Database Links	<b>UniProt:</b> <a href="#">P42082</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">12524</a> Cd86 <a href="#">Related reagents</a>
RRID	AB_1102412
Fusion Partners	Spleen cells from immunized Sprague Dawley rats were fused with cells of the P3U1 myeloma cell line.
Specificity	<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>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol style="list-style-type: none"><li>1. 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>2. 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>3. 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>4. 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>5. 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><li>6. Lei, Y. <i>et al.</i> (2021) miR-129-5p Ameliorates Ischemic Brain Injury by Binding to SIAH1 and Activating the mTOR Signaling Pathway. <a href="#">J Mol Neurosci. 71 (9): 1761-71.</a></li></ol>

<b>Storage</b>	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.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2463PET20487">https://www.bio-rad-antibodies.com/SDS/MCA2463PET20487</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Useful Reagents

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

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M375503:210104'

**Printed on 13 May 2024**