

# Datasheet: MCA2463PE

## **BATCH NUMBER INN1605**

Description:	RAT ANTI MOUSE CD86:RPE
Specificity:	CD86
Other names:	B7-2
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	PO3
Isotype:	lgG2b
Quantity:	100 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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 conjuga	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized				
Reconstitution	Reconstitute with 1.	0 ml distilled water				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)			
	RPE 488nm laser	496	578			
Preparation	Purified IgG prepare supernatant	ed by affinity chromatog	raphy on Protein G from tissue cul	lture		
Buffer Solution	Phosphate buffered	saline				
Preservative Stabilisers	0.09% Sodium Azid					

5% Sucrose

Immunogen

Mouse B-cell line, BCL1.

### External Database Links

#### **UniProt:**

P42082 Related reagents

#### **Entrez Gene:**

12524 Cd86 Related reagents

#### **RRID**

AB 808470

#### **Fusion Partners**

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

# **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).

### Flow Cytometry

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

#### 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. <u>J Immunol.</u> 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. <u>J Immunol. 167 (9):</u> 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. <u>Int Immunol. 9 (5): 637-44.</u>
- 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.
- 6. Lei, Y. et al. (2021) miR-129-5p Ameliorates Ischemic Brain Injury by Binding to SIAH1 and Activating the mTOR Signaling Pathway. <u>J Mol Neurosci. 71 (9): 1761-71.</u>

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
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2463PE">https://www.bio-rad-antibodies.com/SDS/MCA2463PE</a> 20487
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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 'M375502:210104'

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