

## Datasheet: MCA2874

<b>Description:</b>	MOUSE ANTI RAT CD86
<b>Specificity:</b>	CD86
<b>Other names:</b>	B7-2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	24F
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.25 mg

## 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	▪			1/25 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

Where this product 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 product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Rat
<b>Product Form</b>	Purified IgG - liquid
<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 (NaN <sub>3</sub> )

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	HTLV-1 transformed Lewis-S1 cells.
<b>RRID</b>	AB_1833756
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the P3U1 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Rat CD86 antibody, clone 24F</b> recognizes rat CD86, otherwise known as B7-2, a type I transmembrane protein and member of the Ig superfamily, which acts as a ligand for both CD28 and CD152 (CTLA-4), and is primarily expressed on antigen presenting cells (APCs) including dendritic cells, and also on germinal centre B cells and macrophages.</p> <p>Like CD80, CD86 is an accessory molecule which functions in the CD28-CD80/CD86 co-stimulatory pathway, vital for T cell activation, crosstalk between T and B cells, and Th<sub>2</sub>-mediated Ig production.</p> <p>Mouse anti Rat CD86 antibody, clone 24F has been shown to block the co-stimulatory activity of rat CD86 (<a href="#">Maeda et al. 1997</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Damoiseaux, J.G. <i>et al.</i> (1998) Costimulatory molecules CD80 and CD86 in the rat; tissue distribution and expression by antigen-presenting cells. <a href="#">J Leukoc Biol. 64 (6): 803-9.</a></li> <li>2. Kano, M. <i>et al.</i> (1998) A crucial role of host CD80 and CD86 in rat cardiac xenograft rejection in mice. <a href="#">Transplantation. 65: 837-43.</a></li> <li>3. Sacedón, R. <i>et al.</i> (1999) Glucocorticoid-mediated regulation of thymic dendritic cell function. <a href="#">Int Immunol. 11: 1217-24.</a></li> <li>4. Hanabuchi, S. <i>et al.</i> (2000) Development of human T-cell leukemia virus type 1-transformed tumors in rats following suppression of T-cell immunity by CD80 and CD86 blockade. <a href="#">J Virol. 74: 428-35.</a></li> <li>5. Tamatani, T. <i>et al.</i> (2000) AILIM/ICOS: a novel lymphocyte adhesion molecule. <a href="#">Int Immunol. 12: 51-5.</a></li> <li>6. Kawai, T. <i>et al.</i> (2000) T(h)1 transmigration anergy: a new concept of endothelial cell-T cell regulatory interaction. <a href="#">Int Immunol. 12: 937-48.</a></li> <li>7. MacPhee, I.A. <i>et al.</i> (2002) The Th2-response in mercuric chloride-induced autoimmunity requires continuing costimulation via CD28. <a href="#">Clin Exp Immunol. 129: 405-10.</a></li> <li>8. Ghiringhelli, F. <i>et al.</i> (2005) Tumor cells convert immature myeloid dendritic cells into TGF-beta-secreting cells inducing CD4+CD25+ regulatory T cell proliferation. <a href="#">J Exp Med. 202: 919-29.</a></li> <li>9. MacPhee, I.A. <i>et al.</i> (2006) Blockade of OX40-ligand after initial triggering of the T helper 2 response inhibits mercuric chloride-induced autoimmunity. <a href="#">Immunology. 117:</a></li> </ol>

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10. Yrlid, U. *et al.* (2006) A distinct subset of intestinal dendritic cells responds selectively to oral TLR7/8 stimulation. [Eur J Immunol. 36: 2639-48.](#)

11. Dilek, N. *et al.* (2012) Control of transplant tolerance and intragraft regulatory T cell localization by myeloid-derived suppressor cells and CCL5. [J Immunol. 188: 4209-16.](#)

12. Matsumoto, S. *et al.* (2015) CD200+ and CD200- macrophages accumulated in ischemic lesions of rat brain: the two populations cannot be classified as either M1 or M2 macrophages. [J Neuroimmunol. 282: 7-20.](#)

13. Patil, P.S. *et al.* (2016) Fluorinated methacrylamide chitosan hydrogels enhance collagen synthesis in wound healing through increased oxygen availability. [Acta Biomater. 36: 164-74.](#)

14. Hellenbrand, D.J. *et al.* (2019) Sustained interleukin-10 delivery reduces inflammation and improves motor function after spinal cord injury. [J Neuroinflammation. 16 \(1\): 93.](#)

15. Zhou, X. *et al.* (2022) Dusp6 deficiency attenuates neutrophil-mediated cardiac damage in the acute inflammatory phase of myocardial infarction. [Nat Commun. 13 \(1\): 6672.](#)

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<b>Storage</b>	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.  Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2874">https://www.bio-rad-antibodies.com/SDS/MCA2874</a> 10040
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

**North & South** Tel: +1 800 265 7376

**Worldwide**

Tel: +44 (0)1865 852 700

**Europe**

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'M384033:210513'

**Printed on 06 Mar 2024**

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