

Datasheet: MCA2874PE

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| Description: | MOUSE ANTI RAT CD86:RPE |
| Specificity: | CD86 |
| Other names: | B7-2 |
| Format: | RPE |
| Product Type: | Monoclonal Antibody |
| Clone: | 24F |
| Isotype: | IgG1 |
| 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 www.bio-rad-antibodies.com/protocols.

| | Yes | No | Not Determined | Suggested Dilution |
|----------------|-----|----|----------------|--------------------|
| Flow Cytometry | ▪ | | | Neat |

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.

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| Target Species | Rat | | |
| Product Form | Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized | | |
| Reconstitution | Reconstitute with 1ml distilled 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 from tissue culture supernatant | | |
| Buffer Solution | Phosphate buffered saline | | |
| Preservative | 0.09% Sodium Azide (NaN ₃) | | |
| Stabilisers | 1% Bovine Serum Albumin | | |
| | 5% Sucrose | | |

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| Immunogen | HTLV-1 transformed Lewis-S1 cells. |
| RRID | AB_2075122 |
| Fusion Partners | Spleen cells from immunised Balb/c mice were fused with cells of the P3U1 mouse myeloma cell line. |
| Specificity | <p>Mouse anti Rat CD86 antibody, clone 24F 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 Th₂-mediated Ig production.</p> <p>Mouse anti Rat CD86 antibody, clone 24F has been shown to block the co-stimulatory activity of rat CD86 (Maeda et al. 1997).</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul. |
| References | <ol style="list-style-type: none"> Maeda, K. <i>et al.</i> (1997) Characterization of rat CD80 and CD86 by molecular cloning and mAb. Int Immunol. 9 (7): 993-1000. Damoiseaux, J.G. <i>et al.</i> (1998) Costimulatory molecules CD80 and CD86 in the rat; tissue distribution and expression by antigen-presenting cells. J Leukoc Biol. 64 (6): 803-9. 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. J Virol. 74: 428-35. Kano, M. <i>et al.</i> (1998) A crucial role of host CD80 and CD86 in rat cardiac xenograft rejection in mice. Transplantation. 65: 837-43. Tamatani, T. <i>et al.</i> (2000) AILIM/ICOS: a novel lymphocyte adhesion molecule. Int Immunol. 12: 51-5. Dilek, N. <i>et al.</i> (2012) Control of transplant tolerance and intra-graft regulatory T cell localization by myeloid-derived suppressor cells and CCL5. J Immunol. 188: 4209-16. 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. J Exp Med. 202: 919-29. Sacedón, R. <i>et al.</i> (1999) Glucocorticoid-mediated regulation of thymic dendritic cell function. Int Immunol. 11: 1217-24. Kawai, T. <i>et al.</i> (2000) T(h)1 transmigration anergy: a new concept of endothelial cell-T cell regulatory interaction. Int Immunol. 12: 937-48. MacPhee, I.A. <i>et al.</i> (2002) The Th2-response in mercuric chloride-induced autoimmunity requires continuing costimulation via CD28. Clin Exp Immunol. 129: 405-10. 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. Immunology. 117: 402-8. |

12. 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.](#)
13. 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.](#)
14. 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.](#)
15. 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.](#)

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| Storage | Prior to reconstitution store at +4°C. After reconstitution 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: 20487: https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf |
| Regulatory | For research purposes only |

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA1209PE\)](#)

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|----------------------------------|---|------------------|---|---------------|---|
| North & South America | Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com | Worldwide | Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com | Europe | Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com |
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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://www.bio-rad-antibodies.com/datasheets)
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