

Datasheet: MCA2462PET

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| Description: | RAT ANTI MOUSE CD80:RPE |
| Specificity: | CD80 |
| Other names: | B7-1 |
| Format: | RPE |
| Product Type: | Monoclonal Antibody |
| Clone: | RM80 |
| Isotype: | IgG2a |
| Quantity: | 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.

| | 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.

| Target Species | Mouse | | | | | | |
|---------------------------------|---|-------------------|---------------------|-------------------|-----------------|-----|-----|
| Product Form | Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized | | | | | | |
| Reconstitution | Reconstitute in 0.25 ml distilled water | | | | | | |
| Max Ex/Em | <table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table> | Fluorophore | Excitation Max (nm) | Emission Max (nm) | RPE 488nm laser | 496 | 578 |
| 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 Stabilisers | 0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 5% Sucrose | | | | | | |

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|--------------------------------|---|
| Immunogen | BCL1 cells expressing CD80. |
| External Database Links | <p>UniProt: Q00609 Related reagents</p> <p>Entrez Gene: 12519 Cd80 Related reagents</p> |
| Synonyms | B7 |
| RRID | AB_1102378 |
| Fusion Partners | Spleen cells from immunised SD rats were fused with cells of the P3U1 myeloma cell line. |
| Specificity | <p>Rat anti Mouse CD80 antibody, clone RM80 recognizes mouse CD80 (B7-1), a ~60 kDa cell surface glycoprotein which is a member of the CD28/B7 family. In mice, CD80 is expressed on monocytes, peritoneal macrophages and dendritic cells, and expression may be significantly increased upon B lymphocytes by LPS and by IL-4.</p> <p>CD80 has been identified as a ligand for CD28 and cytotoxic T-lymphocyte antigen-4 (CTLA-4), two structurally similar molecules expressed on T cells. CD28 and CTLA4 are two receptors that have essential but opposing functions in T-cell stimulation. The interaction of CD80 with CD28 stimulates and sustains T cell responses, whereas the interaction of CD80 with CTLA4 is reported to inhibit T-cell responses.</p> |
| Flow Cytometry | <p>Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.</p> <p>The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).</p> |
| References | <ol style="list-style-type: none"> 1. Nuriya, S. <i>et al.</i> (1996) The differential role of CD86 and CD80 co-stimulatory molecules in the induction and the effector phases of contact hypersensitivity. Int Immunol. 8 (6): 917-26. 2. Jin LP <i>et al.</i> (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. 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. Int Immunol. 9 (5): 637-44. 4. 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. J Immunol. 167 (9): 4981-6. 5. Bedoret, D. <i>et al.</i> (2009) Lung interstitial macrophages alter dendritic cell functions to prevent airway allergy in mice. J Clin Invest. 119 (12): 3723-38. 6. Legutko, A. <i>et al.</i> (2011) Sirtuin 1 Promotes Th2 Responses and Airway Allergy by Repressing Peroxisome Proliferator-Activated Receptor-γ Activity in Dendritic |

Cells. [J Immunol. 187: 4517-29.](#)

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| 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 | 18 months from date of reconstitution |
| Health And Safety Information | Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf |
| Regulatory | For research purposes only |

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA1212PE\)](#)

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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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