

## Datasheet: MCA2462SBV515

**BATCH NUMBER 100008242**

<b>Description:</b>	RAT ANTI MOUSE CD80:StarBright Violet 515
<b>Specificity:</b>	CD80
<b>Other names:</b>	B7-1
<b>Format:</b>	StarBright Violet 515
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	RM80
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS/0.5ml

### 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

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>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to StarBright Violet 515 - liquid						
<b>Max Ex/Em</b>	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>StarBright Violet 515</td> <td>402</td> <td>516</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	StarBright Violet 515	402	516
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
StarBright Violet 515	402	516					
<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> ) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350						

0.05% Tween 20

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<b>Immunogen</b>	BCL1 cells expressing CD80.
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<b>External Database Links</b>	<b>UniProt:</b> <a href="#">Q00609</a> <a href="#">Related reagents</a>
	<b>Entrez Gene:</b> <a href="#">12519</a> Cd80 <a href="#">Related reagents</a>

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<b>Synonyms</b>	B7
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<b>Fusion Partners</b>	Spleen cells from immunized SD rats were fused with cells of the P3U1 myeloma cell line.
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<b>Specificity</b>	<p><b>Rat anti Mouse CD80 antibody, clone RM80</b> 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>
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<b>Flow Cytometry</b>	Use 5µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
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<b>References</b>	<ol style="list-style-type: none"><li>1. 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>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. 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. <a href="#">J Immunol. 173 (6): 3612-9.</a></li><li>4. Inada, T. <i>et al.</i> (2009) Vaccines using dendritic cells, differentiated with propofol, enhance antitumor immunity in mice. <a href="#">Immunopharmacol Immunotoxicol. 31 (1): 150-7.</a></li><li>5. 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>6. Deng, J. <i>et al.</i> (2010) Dendritic cells loaded with ultrasound-ablated tumour induce in vivo specific antitumour immune responses. <a href="#">Ultrasound Med Biol. 36 (3): 441-8.</a></li><li>7. 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>8. He, Y.T. <i>et al.</i> (2016) <i>In vitro</i> generation of cytotoxic T lymphocyte response using</li></ol>
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dendritic cell immunotherapy in osteosarcoma. [Oncol Lett. 12 \(2\): 1101-6.](#)

9. Kim, I. *et al.* (2016) Immunological characterization of de novo and recall alloantibody suppression by CTLA4Ig in a mouse model of allosensitization. [Transpl Immunol. 38: 84-92.](#)

10. Curina, G. *et al.* (2018) Evaluation of immune responses in mice and sheep inoculated with a live attenuated *Brucella melitensis*. REV1 vaccine produced in bioreactor. [Vet Immunol Immunopathol. 198: 44-53.](#)

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<b>Storage</b>	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20471 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2462SBV515">https://www.bio-rad-antibodies.com/SDS/MCA2462SBV515</a> 20471
<b>Regulatory</b>	For research purposes only

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## 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://www.bio-rad-antibodies.com/datasheets)  
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