

## Datasheet: MCA2462SBV790

**BATCH NUMBER 64596782**

<b>Description:</b>	RAT ANTI MOUSE CD80:StarBright Violet 790
<b>Specificity:</b>	CD80
<b>Other names:</b>	B7-1
<b>Format:</b>	StarBright Violet 790
<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.

#### Target Species

Mouse

#### Product Form

Purified IgG conjugated to StarBright Violet 790 - liquid

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright Violet 790	402	782

#### 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<sub>3</sub>)  
1% Bovine Serum Albumin  
0.1% Pluronic F68  
0.1% PEG 3350

0.05% Tween 20

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**Immunogen** BCL1 cells expressing CD80.

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**External Database Links**

**UniProt:**

[Q00609](#)    [Related reagents](#)

**Entrez Gene:**

[12519](#) Cd80    [Related reagents](#)

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**Synonyms** B7

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**Fusion Partners** Spleen cells from immunized SD rats were fused with cells of the P3U1 myeloma cell line.

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**Specificity** **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.

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.

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**Flow Cytometry** 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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**References**

1. Nakajima, A. *et al.* (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.](#)
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3. Jin LP *et al.* (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.](#)
4. Inada, T. *et al.* (2009) Vaccines using dendritic cells, differentiated with propofol, enhance antitumor immunity in mice. [Immunopharmacol Immunotoxicol. 31 \(1\): 150-7.](#)
5. 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.](#)
6. Deng, J. *et al.* (2010) Dendritic cells loaded with ultrasound-ablated tumour induce in vivo specific antitumour immune responses. [Ultrasound Med Biol. 36 \(3\): 441-8.](#)
7. 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.](#)
8. He, Y.T. *et al.* (2016) *In vitro* generation of cytotoxic T lymphocyte response using

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/MCA2462SBV790">https://www.bio-rad-antibodies.com/SDS/MCA2462SBV790</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 \(BUF041B\)](#)

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

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto:antibody_sales_de@bio-rad.com)

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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