

## Datasheet: MCA2873T

<b>Description:</b>	MOUSE ANTI RAT CD80
<b>Specificity:</b>	CD80
<b>Other names:</b>	B7-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	3H5
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	25 µg

## 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>External Database Links</b>	<b>UniProt:</b> <a href="#">O55202</a> <a href="#">Related reagents</a>
<b>RRID</b>	AB_1720049
<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 CD80, clone 3H5</b> specifically recognizes rat CD80, otherwise known as B7-1, a type I transmembrane glycoprotein 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.</p> <p>CD80 is a B cell activation antigen, which functions in the CD28-CD80/CD86 co-stimulatory pathway vital for T cell activation and proliferation. In contrast, the interaction of CD80 with CD152 has an inhibitory effect on T cell responses.</p> <p>Clone 3H5 has been shown to block the co-stimulatory activity of rat CD80.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Maeda, K. <i>et al.</i> (1997) Characterization of rat CD80 and CD86 by molecular cloning and mAb. <a href="#">Int. Immunol. 9: 993-1000.</a></li> <li>2. 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>3. 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>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. Dilek, N. <i>et al.</i> (2012) Control of transplant tolerance and intragraft regulatory T cell localization by myeloid-derived suppressor cells and CCL5. <a href="#">J Immunol. 188: 4209-16.</a></li> <li>7. 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>8. Sacedón, R. <i>et al.</i> (1999) Glucocorticoid-mediated regulation of thymic dendritic cell function. <a href="#">Int Immunol. 11: 1217-24.</a></li> </ol>

9. Kawai, T. *et al.* (2000) T(h)1 transmigration anergy: a new concept of endothelial cell-T cell regulatory interaction. [Int Immunol. 12: 937-48.](#)
10. MacPhee, I.A. *et al.* (2002) The Th2-response in mercuric chloride-induced autoimmunity requires continuing costimulation via CD28. [Clin Exp Immunol. 129: 405-10.](#)
11. MacPhee, I.A. *et al.* (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. Fan, C.B. *et al.* (2015) Alloantigen-specific T-cell hyporesponsiveness induced by dnIKK2 gene-transfected recipient immature dendritic cells. [Cell Immunol. 297 \(2\): 100-7.](#)

<b>Storage</b>	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
<b>Guarantee</b>	18 months from date of despatch.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: 10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight@800</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

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

<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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