

## Datasheet: MCA2465PBT

<b>Description:</b>	RAT ANTI MOUSE CD273:Pacific Blue®
<b>Specificity:</b>	CD273
<b>Other names:</b>	PD-L2
<b>Format:</b>	Pacific Blue®
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	TY25
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	25 TESTS/0.25ml

## 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 - 1/5

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Mouse		
Product Form	Purified IgG conjugated to Pacific Blue® - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Pacific Blue®	410	455
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		
	1%	Bovine Serum Albumin	
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		

<b>Immunogen</b>	B7-DC transfected RAW264.7 cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q9WUL5</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">58205</a>    Pcdcl1g2    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	B7dc, Btdc, Cd273, Pdl2
<b>RRID</b>	AB_2162005
<b>Fusion Partners</b>	Lymph node cells from immunized SD rats were fused with the cells of the P3U1 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse CD273 antibody, clone TY25</b> recognises mouse CD273, also known as B7-dendritic cell (B7-DC), or programmed death ligand-2 (PD-L2). CD273 is a 247 amino acid, ~42 kDa member of the B7 family. The expression of CD273 is restricted to a subpopulation of dendritic cells (DCs), and DCs and macrophages that have been stimulated with interferon gamma, GM-CSF or IL-4.</p> <p>CD273 has been identified as a ligand for PD-1(CD279), along with another B7 family member B7-H1 (CD274). CD273 and B7-H1 co-stimulate or inhibit T cell proliferation and cytokine production (<a href="#">Schmidt et al.2015</a>).</p> <p><b>Rat anti Mouse CD273 antibody, clone TY25</b> is reported to block the binding of CD273 (B7-DC) to it's receptor (<a href="#">Matsumoto et al. 2004</a>).</p>
<b>Flow Cytometry</b>	<p>Use 10ul of the suggested working dilution to label 10<sup>6</sup> 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 <a href="#">SeroBlock FcR</a>.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Kanai, T. <i>et al.</i> (2003) Blockade of B7-H1 suppresses the development of chronic intestinal inflammation. <a href="#">J Immunol. 171 (8): 4156-63.</a></li> <li>2. Matsumoto, K. <i>et al.</i> (2004) B7-DC regulates asthmatic response by an IFN-gamma-dependent mechanism. <a href="#">J Immunol. 172 (4): 2530-41.</a></li> <li>3. Yamazaki, T. <i>et al.</i> (2005) Blockade of B7-H1 on macrophages suppresses CD4+ T cell proliferation by augmenting IFN-gamma-induced nitric oxide production. <a href="#">J Immunol. 175: 1586-92.</a></li> <li>4. Furuhashi K <i>et al.</i> (2012) Mouse lung CD103+ and CD11b high dendritic cells preferentially induce distinct CD4+ T-cell responses. <a href="#">Am J Respir Cell Mol Biol. 46 (2): 165-72.</a></li> <li>5. Lopez-Medina, M. <i>et al.</i> (2015) Salmonella induces PD-L1 expression in B cells. <a href="#">Immunol Lett. 167 (2): 131-40.</a></li> <li>6. López-Medina, M. <i>et al.</i> (2015) Salmonella impairs CD8 T cell response through PD-1: PD-L axis. <a href="#">Immunobiology. 220 (12): 1369-80.</a></li> </ol>

<b>Storage</b>	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	<p>This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or <a href="mailto:outlicensing@thermofisher.com">outlicensing@thermofisher.com</a></p>
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2465PBT">https://www.bio-rad-antibodies.com/SDS/MCA2465PBT</a></p> <p>10041</p>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Pacific Blue® \(MCA1212PB\)](#)

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