

## 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.

|                                       |                                                                                               |                            |                          |
|---------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------|--------------------------|
| <b>Target Species</b>                 | Mouse                                                                                         |                            |                          |
| <b>Product Form</b>                   | Purified IgG conjugated to Pacific Blue® - liquid                                             |                            |                          |
| <b>Max Ex/Em</b>                      | <b>Fluorophore</b>                                                                            | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                                       | Pacific Blue®                                                                                 | 410                        | 455                      |
| <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</b>                   | 0.09% Sodium Azide                                                                            |                            |                          |
| <b>Stabilisers</b>                    | 1% Bovine Serum Albumin                                                                       |                            |                          |
| <b>Approx. Protein Concentrations</b> | IgG concentration 0.05 mg/ml                                                                  |                            |                          |
| <b>Immunogen</b>                      | B7-DC transfected RAW264.7 cells.                                                             |                            |                          |
| <b>External Database Links</b>        | <b>UniProt:</b><br><a href="#">Q9WUL5</a> <a href="#">Related reagents</a>                    |                            |                          |

**Entrez Gene:**

[58205](#) Pdcd1lg2 [Related reagents](#)

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|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Synonyms</b>         | B7dc, Btdc, Cd273, Pdl2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Fusion Partners</b>  | Lymph node cells from immunised 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). Studies suggest that both CD273 and B7-H1 co-stimulate or inhibit T cell proliferation and cytokine production.</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>). Removal of sodium azide is recommended prior to use in functional assays, the use of <a href="#">EQU003</a> is recommended for this purpose.</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 SeroBlock FcR (<a href="#">BUF041A/B/C</a>)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>References</b>       | <ol style="list-style-type: none"><li>1. 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>2. 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>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. López-Medina M <i>et al.</i> (2015) <i>Salmonella</i> induces PD-L1 expression in B cells. <a href="#">Immunol Lett. pii: S0165-2478(15)30018-3.</a></li><li>6. López-Medina M <i>et al.</i> (2015) <i>Salmonella</i> impairs CD8 T cell response through PD-1: PD-L axis. <a href="#">Immunobiology. pii: S0171-2985(15)30028-0.</a></li></ol> |
| <b>Storage</b>          | <p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Shelf Life</b>       | 18 months from date of despatch.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10041 available at:<br>10041: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a> |
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|-------------------|----------------------------|
| <b>Regulatory</b> | For research purposes only |
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## Related Products

### Recommended Negative Controls

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

### Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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