

## Datasheet: MCA2465

|                      |                      |
|----------------------|----------------------|
| <b>Description:</b>  | RAT ANTI MOUSE CD273 |
| <b>Specificity:</b>  | CD273                |
| <b>Other names:</b>  | PD-L2                |
| <b>Format:</b>       | Purified             |
| <b>Product Type:</b> | Monoclonal Antibody  |
| <b>Clone:</b>        | TY25                 |
| <b>Isotype:</b>      | IgG2a                |
| <b>Quantity:</b>     | 0.25 mg              |

## 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             | ■   |    |                | 1/100 - 1/200      |
| Immunohistology - Frozen   | ■   |    |                |                    |
| Immunohistology - Paraffin |     |    | ■              |                    |
| ELISA                      |     |    | ■              |                    |
| Immunoprecipitation        | ■   |    |                |                    |
| Western Blotting           |     |    | ■              |                    |

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 - 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                                                                            |
| <b>Carrier Free</b>                   | Yes                                                                                           |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.0 mg/ml                                                                   |
| <b>Immunogen</b>                      | B7-DC transfected RAW264.7 cells.                                                             |

**External Database  
Links**

**UniProt:**

[Q9WUL5](#)

[Related reagents](#)

**Entrez Gene:**

[58205](#)

Pdcd1lg2

[Related reagents](#)

**Synonyms**

B7dc, Btdc, Cd273, Pdl2

**Fusion Partners**

Lymph node cells from immunised SD rats were fused with the cells of the P3U1 myeloma cell line.

**Specificity**

**Rat anti Mouse CD273 antibody, clone TY25** 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.

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.

**Rat anti Mouse CD273 antibody, clone TY25** is reported to block the binding of CD273 (B7-DC) to it's receptor ([Matsumoto \*et al.\* 2004](#)). Removal of sodium azide is recommended prior to use in functional assays, the use of [EQU003](#) is recommended for this purpose.

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

**References**

1. Matsumoto, K. *et al.* (2004) B7-DC regulates asthmatic response by an IFN-gamma-dependent mechanism. [J Immunol. 172 \(4\): 2530-41.](#)
2. Kanai, T. *et al.* (2003) Blockade of B7-H1 suppresses the development of chronic intestinal inflammation. [J Immunol. 171 \(8\): 4156-63.](#)
3. Yamazaki, T. *et al.* (2005) Blockade of B7-H1 on macrophages suppresses CD4+ T cell proliferation by augmenting IFN-gamma-induced nitric oxide production. [J Immunol. 175: 1586-92.](#)
4. Furuhashi K *et al.* (2012) Mouse lung CD103+ and CD11b high dendritic cells preferentially induce distinct CD4+ T-cell responses. [Am J Respir Cell Mol Biol. 46 \(2\): 165-72.](#)
5. López-Medina M *et al.* (2015) *Salmonella* induces PD-L1 expression in B cells. [Immunol Lett. pii: S0165-2478\(15\)30018-3.](#)
6. López-Medina M *et al.* (2015) *Salmonella* impairs CD8 T cell response through PD-1: PD-L axis. [Immunobiology. pii: S0171-2985\(15\)30028-0.](#)

**Storage**

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.

**Shelf Life**

18 months from date of despatch.

**Health And Safety  
Information**

Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

**Regulatory**

For research purposes only

## Related Products

### Recommended Secondary Antibodies

|                                                |                                                                                         |
|------------------------------------------------|-----------------------------------------------------------------------------------------|
| Rabbit Anti Rat IgG (STAR16...)                | <a href="#">DyLight®800</a>                                                             |
| Goat Anti Rat IgG (STAR73...)                  | <a href="#">RPE</a>                                                                     |
| Rabbit Anti Rat IgG (STAR21...)                | <a href="#">HRP</a>                                                                     |
| Rabbit Anti Rat IgG (STAR17...)                | <a href="#">FITC</a>                                                                    |
| Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) | <a href="#">DyLight®549</a> , <a href="#">DyLight®649</a> , <a href="#">DyLight®800</a> |
| Goat Anti Rat IgG (STAR131...)                 | <a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>                                     |
| Goat Anti Rat IgG (STAR69...)                  | <a href="#">FITC</a>                                                                    |
| Goat Anti Rat IgG (STAR72...)                  | <a href="#">HRP</a>                                                                     |

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
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'M315739:180503'

Printed on 20 Jun 2018