

Datasheet: MCA2465A647T

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| Description: | RAT ANTI MOUSE CD273:Alexa Fluor® 647 |
| Specificity: | CD273 |
| Other names: | PD-L2 |
| Format: | ALEXA FLUOR® 647 |
| Product Type: | Monoclonal Antibody |
| Clone: | TY25 |
| Isotype: | IgG2a |
| Quantity: | 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.

| | Yes | No | Not Determined | Suggested Dilution |
|----------------|-----|----|----------------|--------------------|
| Flow Cytometry | ■ | | | 1/5 - 1/10 |

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 Alexa Fluor® 647 - liquid | | | | | | |
| Max Ex/Em | <table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Alexa Fluor®647</td> <td>650</td> <td>665</td> </tr> </tbody> </table> | Fluorophore | Excitation Max (nm) | Emission Max (nm) | Alexa Fluor®647 | 650 | 665 |
| Fluorophore | Excitation Max (nm) | Emission Max (nm) | | | | | |
| Alexa Fluor®647 | 650 | 665 | | | | | |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant | | | | | | |
| Buffer Solution | Phosphate buffered saline | | | | | | |
| Preservative | 0.09% Sodium Azide | | | | | | |
| Stabilisers | 1% Bovine Serum Albumin | | | | | | |
| Approx. Protein Concentrations | IgG concentration 0.05 mg/ml | | | | | | |
| Immunogen | B7-DC transfected RAW264.7 cells. | | | | | | |
| External Database Links | UniProt: Q9WUL5 Related reagents | | | | | | |

Entrez Gene:

[58205](#) Pcd1lg2 [Related reagents](#)

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| Synonyms | B7dc, Btdc, Cd273, Pdl2 |
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| RRID | AB_2162006 |
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| Fusion Partners | Lymph node cells from immunised SD rats were fused with the cells of the P3U1 myeloma cell line. |
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| Specificity | <p>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.</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>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.</p> |
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| Flow Cytometry | <p>Use 10ul of the suggested working dilution to label 10⁶ 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.</p> |
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| References | <ol style="list-style-type: none">1. Matsumoto, K. <i>et al.</i> (2004) B7-DC regulates asthmatic response by an IFN-gamma-dependent mechanism. J Immunol. 172 (4): 2530-41.2. Kanai, T. <i>et al.</i> (2003) Blockade of B7-H1 suppresses the development of chronic intestinal inflammation. J Immunol. 171 (8): 4156-63.3. 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. J Immunol. 175: 1586-92.4. Furuhashi K <i>et al.</i> (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 <i>et al.</i> (2015) <i>Salmonella</i> induces PD-L1 expression in B cells. Immunol Lett. pii: S0165-2478(15)30018-3.6. López-Medina M <i>et al.</i> (2015) <i>Salmonella</i> impairs CD8 T cell response through PD-1: PD-L axis. Immunobiology. pii: S0171-2985(15)30028-0. |
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| Storage | <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> |
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| Guarantee | 12 months from date of despatch |
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Health And Safety Information Material Safety Datasheet documentation #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA1212A647\)](#)

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