

Datasheet: MCA2465A647

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:	100 TESTS/1ml

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	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	<p>UniProt: Q9WUL5 Related reagents</p> <p>Entrez Gene: 58205 Pcd1lg2 Related reagents</p>
Synonyms	B7dc, Btdc, Cd273, Pdl2
RRID	AB_905917
Fusion Partners	Lymph node cells from immunized SD rats were fused with the cells of the P3U1 myeloma cell line.
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). CD273 and B7-H1 co-stimulate or inhibit T cell proliferation and cytokine production (Schmidt et al.2015).</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).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul. 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 .
References	<ol style="list-style-type: none"> 1. Kanai, T. <i>et al.</i> (2003) Blockade of B7-H1 suppresses the development of chronic intestinal inflammation. J Immunol. 171 (8): 4156-63. 2. Matsumoto, K. <i>et al.</i> (2004) B7-DC regulates asthmatic response by an IFN-gamma-dependent mechanism. J Immunol. 172 (4): 2530-41. 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. Lopez-Medina, M. <i>et al.</i> (2015) Salmonella induces PD-L1 expression in B cells. Immunol Lett. 167 (2): 131-40. 6. López-Medina, M. <i>et al.</i> (2015) Salmonella impairs CD8 T cell response through PD-1: PD-L axis. Immunobiology. 220 (12): 1369-80.

Storage 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.

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.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2465A647>
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Regulatory For research purposes only

Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

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