

Datasheet: MCA2465F

Description:	RAT ANTI MOUSE CD273:FITC
Specificity:	CD273
Other names:	PD-L2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	TY25
Isotype:	lgG2a
Quantity:	0.1 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.

	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.

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Target Species	Mouse			
Product Form	Purified IgG conjugat	ed to Fluorescein Isoth	niocyanate Isomer	1 (FITC) - liqui
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm	1)
	FITC	490	525	
Buffer Solution	Phosphate buffered s	aline		
Preservative	0.09% Sodium Azide			
Stabilisers	1% Bovine Serum	Albumin		

Immunogen	B7-DC transfected RAW264.7 cells.
External Database Links	UniProt: Q9WUL5 Related reagents
	Entrez Gene: <u>58205</u> Pdcd1lg2 <u>Related reagents</u>
Synonyms	B7dc, Btdc, Cd273, Pdl2
RRID	AB_905916
Fusion Partners	Lymph node cells from immunized 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). CD273 and B7-H1 co-stimulate or inhibit T cell proliferation and cytokine production (Schmidt et al.2015).
	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).
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	 Kanai, T. <i>et al.</i> (2003) Blockade of B7-H1 suppresses the development of chronic intestinal inflammation. J Immunol. 171 (8): 4156-63. Matsumoto, K. <i>et al.</i> (2004) B7-DC regulates asthmatic response by an IFN-gamma-dependent mechanism. J Immunol. 172 (4): 2530-41. 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. 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. Lopez-Medina, M. <i>et al.</i> (2015) Salmonella induces PD-L1 expression in B cells. Immunol Lett. 167 (2): 131-40. 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
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2465F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:FITC (MCA1212F)

Recommended Useful Reagents

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

MOUSE SEROBLOCK FCR (BUFU41B)

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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 'M385430:210513'

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