

Datasheet: MCA2465F

BATCH NUMBER 150835

Description:	RAT ANTI MOUSE CD273:FITC
Specificity:	CD273
Other names:	PD-L2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	TY25
Isotype:	IgG2a
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.

Target Species	Mouse						
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - 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>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
FITC	490	525					
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	IgG concentration 0.1 mg/ml						

Concentrations

Immunogen B7-DC transfected RAW264.7 cells.

External Database Links

UniProt:

[Q9WUL5](#) [Related reagents](#)

Entrez Gene:

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

Synonyms B7dc, Btdc, Cd273, Pdl2

RRID AB_905916

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](#)).

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**
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. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
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 \(BUF041B\)](#)

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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
'M366989:200529'

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