

Datasheet: MCA2465PB

Description:	RAT ANTI MOUSE CD273:Pacific Blue®		
Specificity:	CD273		
Other names:	PD-L2		
Format:	Pacific Blue®		
Product Type:	Monoclonal Antibody		
Clone:	TY25		
Isotype:	lgG2a		
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				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 conjugate	Purified IgG conjugated to Pacific Blue® - liquid				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nr	m)		
	Pacific Blue®	410	455			
Preparation	Purified IgG prepared supernatant	by affinity chromatog	raphy on Protein G	From tissue culture		
Buffer Solution	Phosphate buffered saline					
Preservative	0.09% Sodium Azide					
Stabilisers	1% Bovine Serum	Albumin				
Approx. Protein Concentrations	IgG concentration 0.0	5 mg/ml				

Immunoge	n
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B7-DC transfected RAW264.7 cells.

External Database

Links

UniProt:

Q9WUL5 Related reagents

Entrez Gene:

58205 Pdcd1lg2 Related reagents

Synonyms

B7dc, Btdc, Cd273, Pdl2

RRID

AB 915153

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 10 ul of the suggested working dilution to label 10^6 cells in 100 ul .

The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using <u>SeroBlock FcR</u>.

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. <u>J Immunol.</u> 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. <u>J Immunol. 175:</u> 1586-92.
- 4. Furuhashi K *et al.* (2012) Mouse lung CD103+ and CD11b high dendritic cells preferentially induce distinct CD4+ T-cell responses. <u>Am J Respir Cell Mol Biol. 46 (2):</u> 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

Acknowledgements

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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:Pacific Blue® (MCA1212PB)

America

North & South Tel: +1 800 265 7376

Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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