

Datasheet: MCA2626EL

Description:	RAT ANTI MOUSE CD274:Low Endotoxin
Specificity:	CD274
Other names:	PD-L1
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	MIH6
Isotype:	IgG2a
Quantity:	0.5 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 - 1/200
Immunohistology - Frozen	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Functional Assays	▪			

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Mouse CD274 - transfected L5178Y cells.
External Database Links	<p>UniProt: Q9EP73 Related reagents</p> <p>Entrez Gene: 60533 Cd274 Related reagents</p>
Synonyms	B7h1, Pdcd111, Pdcd1lg1, Pdl1
RRID	AB_2244324
Fusion Partners	Spleen cells from immunized SD rats were fused with cells of the P3U1 myeloma cell line.
Specificity	<p>Rat anti Mouse CD274 antibody, clone MIH6 detects mouse CD274, also known as B7-H1 and PD-1L, a single pass type I cell membrane glycoprotein, a member of the B7 family of co-stimulatory molecules. CD274 is expressed constitutively on macrophages and dendritic cells, and is induced on activated T-cells, B-cells (Ishada et al. 2002), endothelial cells (Eppihimer et al. 2002) and epithelial cells in response to Interferons alpha, beta and gamma.</p> <p>CD274 is reported to possess dual functions; inhibition of activated effector T cells and co-stimulation of naïve T cells (Selenko-Gebauer et al. 2003). CD274 inhibits proliferation of activated T cells via ligation to the co-inhibitory molecule CD279 (programmed death-1; PD-1) leading to the secretion of the regulatory cytokine interleukin-10 (Cao et al. 2003). CD274 has also been shown to costimulate early T cell priming and differentiation.</p> <p>Deregulated CD274 function has been reported in chronic viral and intracellular bacterial infection, as well as in many autoimmune diseases and cancers (lwai et al. 2002).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
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. Yamazaki, T. <i>et al.</i> (2002) Expression of programmed death 1 ligands by murine T cells and APC. J Immunol. 169 (10): 5538-45. 3. Furuhashi, K. <i>et al.</i> (2011) Mouse Lung CD103⁺ and CD11b^{high} dendritic cells preferentially induce distinct CD4⁺ T cell responses. Am J Respir Crit Care Med 181: 2010: A3795 4. Silk, K.M. <i>et al.</i> (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. J Biomed Biotechnol. 2012: 172420. 5. Haile, S.T. <i>et al.</i> (2013) Soluble CD80 Restores T Cell Activation and Overcomes

Tumor Cell Programmed Death Ligand 1-Mediated Immune Suppression. [J Immunol. 191: 2829-36.](#)

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8. López-Medina, M. *et al.* (2015) *Salmonella* impairs CD8 T cell response through PD-1: PD-L axis. [Immunobiology. 220 \(12\): 1369-80.](#)

9. Waddell, A. *et al.* (2011) Colonic eosinophilic inflammation in experimental colitis is mediated by Ly6C(high) CCR2(+) inflammatory monocyte/macrophage-derived CCL11. [J Immunol. 186 \(10\): 5993-6003.](#)

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12. Volchenkov, R. *et al.* (2013) Type 1 regulatory T cells and regulatory B cells induced by tolerogenic dendritic cells. [Scand J Immunol. 77 \(4\): 246-54.](#)

Storage	Store at -20°C only. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: 10162: https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight@800
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight@800
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Low Endotoxin \(MCA1212EL\)](#)

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'M349460:190306'

Printed on 09 Feb 2021

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