Technical Data Sheet

PE Mouse Anti-Human CD273

Product Information

Material Number:	558066
Alternate Name:	PDCD1LG2; PDCD1 ligand 2; PDCD1L2; PD-1 ligand 2; PD-L2; PDL2; B7-DC; Btdc
Size:	100 tests
Vol. per Test:	20 µl
Clone:	MIH18
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.
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Description

The MIH18 monoclonal antibody specifically binds to CD273, the Programmed Death Ligand 2 (PD-L2). PD-L1 and PD-L2 are newly discovered members of the B7 family that are the ligands for the Programmed Death 1 (PD-1) receptor. They are expressed on immature dendritic cells and mature dendritic cells. PD-L1 is expressed on antigen-presenting cells, including IFN-y-stimulated monocytes and activated human and mouse dendritic cells. Monoclonal antibodies that block PD-1 and PD-L2 on dendritic cells result in enhanced T cell proliferation and cytokine production. PD-L2, also called B7-DC, is expressed on placental trophoblasts, myocardial endothelium and medullary thymic epithelial cells. Studies show overlapping functions of PD-L1 and PD-L2 and indicate an important role for the PD-L:PD-1 pathway in regulating T cell responses.



Flow cytometric analysis for CD273. The PD-L2 transfected cell line MIH90 was stained with either the PE Mouse Anti-Human CD273 antibody (solid line, right histogram) or with an isotype control (dashed line, left histogram). Flow cytometry was performed on a BD FACSCalibur™ flow cytometry system.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application	l						
Flow cytometry Routinely Tested					Routinely Tested		
Suggeste	d Compani	on Product	ts				
<u>Catalog Nu</u>	mber	Name	Name			Size	Clone
555749		PE Mouse IgG1, κ Isotype Control				100 tests	MOPC-21
554680		PE Mouse IgG1, κ Isotype Control				0.1 mg	MOPC-21
554656		Stain Buffer (FBS)				500 ml	(none)
BD Biosci	ences						
bdbiosciences	.com						
United States 877.232.8995	Canada 888.268.5430	Europe 32.53.720.550	Japan 0120.8555.90	Asia Pacific 65.6861.0633	Latin America/Caribbean 0800.771.7157		
For country-sp	ecific contact in	formation, visit	bdbiosciences.co	om/how_to_orde	r/		
Conditions: The i of any patents. B use of our produ product or as a c	information disclose D Biosciences will n ccts. Purchase does n omponent of anoth	d herein is not to b ot be held responsi iot include or carry er product. Any us	e construed as a rec ble for patent infrin any right to resell o e of this product oti	commendation to us gement or other vie r transfer this produ her than the permit	e the above product in violation vlations that may occur with the ct either as a stand-alone ed use without the express		

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Product Notices

- 1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10⁶ cells in a 100-μl experimental sample (a test).
- 2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 5. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 6. An isotype control should be used at the same concentration as the antibody of interest.

References

Bennett F, Luxenberg D, Ling V, et al. Program death-1 engagement upon TCR activation has distinct effects on costimulation and cytokine-driven proliferation: attenuation of ICOS, IL-4 and IL-21, but not CD28, IL-7, and IL-15 responses. J Immunol. 2003; 170:711-718. (Biology)

Brown JA, Dorfman DM, Ma FR, et al. Blockade of programmed death-1 ligand on dendritic cells enhances T cell activation and cytokine production. J Immunol. 2003; 170:1257-1266. (Biology)

Carter L, Fouser LA, Jussif J, et al. PD-1:PD-L inhibitory pathway affects both CD4(+) and CD8(+) T cells and is overcome by IL-2. Eur J Immunol. 2002; 32:634-643. (Biology)

Freeman GJ, Long AJ, Iwai Y, et al. Engagement of PD-1 immunoinhibitory receptor by a novel B7 family member leads to negative regulation of lymphocyte activation. J Exp Med. 2000; 192:1027-1034. (Biology)

Latchman Y, Wood CR, Chernova T, et al. PD-L2 is a second ligand for PD-1 and inhibits T cell activation. *Nat Immunol.* 2001; 2(3):261-268. (Biology) Ohigashi Y, Sho M, Yamada Y, et al. Clinical significance of programmed death-1 ligand-1 and programmed death-1 ligand-2 expression in human esophageal cancer. *Clin Cancer Res.* 2005; 11:2947-2953. (Biology)