

Purified anti-human CD273 (B7-DC, PD-L2) Antibody

Catalog# / Size	345502 / 100 µg
Clone	MIH18
Regulatory Status	RUO
Workshop	HCDM listed
Other Names	B7-DC, PD-L2, PDL2, B7DC
Isotype	Mouse IgG1, κ
Description	CD273, known as B7-DC, is also called programmed death ligand 2 (PDL2). This ligand is a 25 kD type I transmembrane protein and a member of B7 family within the immunoglobulin receptor superfamily and is expressed on a subset of dendritic cells, liver and a small subset of macrophages as well as a few transformed cell lines. CD273 has been reported to be stimulatory on dendritic cells when cross-linked and to inhibit T cell activation upon engaging the PD-1 receptor. CD273 has also been reported to bind to an alternative receptor and to mediate T cell activation through such non-PD1 mediated interactions. Clone MIH18 is reported to block PDL2.

Product Details

Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human B7-DC transfected cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested IHC-F, IHC-P, Block - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤ 0.5 µg per 10 ⁶ cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported applications (for the relevant formats) include: blocking ^{4,5} , and immunohistochemistry in frozen sections ² and paraffin-embedded formalin-fixed sections ⁶ . The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 345504).
Application References	<ol style="list-style-type: none"> 1. Youngnak-Piboonratankit P, <i>et al.</i> 2004. <i>Immunol. Lett.</i> 94:215. (IHC, IF) 2. Ohigashi Y, <i>et al.</i> 2005. <i>Clin. Cancer. Res.</i> 8:2947. (IHC, IF) 3. Hobo W, <i>et al.</i> 2010. <i>Blood</i> 25:4501. (FC) 4. Nagamatsu T, <i>et al.</i> 2009. <i>Hum. Reprod.</i> 24:3160. (Block) 5. Alvarez IB, <i>et al.</i> 2010. <i>J. Infect. Dis.</i> 202:524. (Block) 6. Taube JM, <i>et al.</i> 2014. <i>Clin. Cancer Res.</i> 19:5064. (IHC) PubMed
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> 1. Chevrier S, <i>et al.</i> 2018. <i>Cell Syst.</i> 0.675. PubMed 2. Kim MH, <i>et al.</i> 2018. <i>Cancer Immunol Res.</i> 0.427083333. PubMed 3. Muthumani K, <i>et al.</i> 2012. <i>J Immunol.</i> 187:2932. PubMed

Antigen Details

Structure	B7 Immunoglobulin superfamily, 25 kD
Distribution	Dendritic cells, liver, few transformed cell lines, subset of macrophages
Function	Binds to PD-1 and alternative receptor; ligation on DC stimulates, inhibits T cell responses via PD-1 binding, stimulates T cells via alternative receptor binding and promotes tumor immunity
Ligand/Receptor	PD-1
Cell Type	Dendritic cells, Macrophages
Biology Area	Immunology, Costimulatory Molecules
Molecular Family	CD Molecules, Immune Checkpoint Receptors
Antigen References	1. Carreno BM, <i>et al.</i> 2002. <i>Annu. Rev. Immunol.</i> 20:29. 2. Ohgashi Y, <i>et al.</i> 2005. <i>Clin. Cancer. Res.</i> 8:2947.
Gene ID	80380

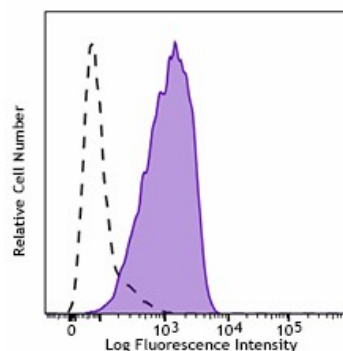
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD273 (B7-DC, PD-L2), PE anti-human CD273 (B7-DC, PD-L2), APC anti-human CD273 (B7-DC, PD-L2), Biotin anti-human CD273 (B7-DC, PD-L2), PE/Cyanine7 anti-human CD273 (B7-DC, PD-L2), Alexa Fluor® 647 anti-human CD273 (B7-DC, PD-L2), APC/Cyanine7 anti-human CD273 (B7-DC, PD-L2), PE/Dazzle™ 594 anti-human CD273 (B7-DC, PD-L2), Brilliant Violet 421™ anti-human CD273 (B7-DC, PD-L2), Ultra-LEAF™ Purified anti-human CD273 (B7-DC, PD-L2)

Product Data



Human monocyte-derived dendritic cells were stained with CD273 (clone MIH18) purified (filled histogram) or mouse IgG1, κ isotype control (open histogram) followed by biotin anti-mouse IgG and Streptavidin-PE.

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