

## Ultra-LEAF™ Purified anti-human CD273 (B7-DC, PD-L2) Antibody

<b>Catalog# / Size</b>	345521 / 100 µg 345522 / 1 mg
<b>Clone</b>	MIH18
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	HCDM listed
<b>Other Names</b>	B7-DC, PD-L2, PDL2, B7DC
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	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

<b>Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human B7-DC transfected cells
<b>Formulation</b>	0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.01 EU/µg of the protein (<0.001 ng/µg of the protein) as determined by the LAL test.
<b>Preparation</b>	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
<b>Concentration</b>	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL. Older lots may have also been bottled at 1 mg/mL. To obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
<b>Application</b>	<a href="#">FC - Quality tested</a> <a href="#">IHC-F, IHC-P, Block - Reported in the literature, not verified in house</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 2.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: blocking <sup>4,5</sup> , and immunohistochemistry in frozen sections <sup>2</sup> and paraffin-embedded formalin-fixed sections <sup>6</sup> . The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 345504).
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Youngnak-Piboonratankit P, <i>et al.</i> 2004. <i>Immunol. Lett.</i> 94:215. (IHC, IF)</li> <li>2. Ohigashi Y, <i>et al.</i> 2005. <i>Clin. Cancer Res.</i> 8:2947. (IHC, IF)</li> <li>3. Hobo W, <i>et al.</i> 2010. <i>Blood</i> 25:4501. (FC)</li> <li>4. Nagamatsu T, <i>et al.</i> 2009. <i>Hum. Reprod.</i> 24:3160. (Block)</li> <li>5. Alvarez IB, <i>et al.</i> 2010. <i>J. Infect. Dis.</i> 202:524. (Block)</li> <li>6. Taube JM, <i>et al.</i> 2014. <i>Clin. Cancer Res.</i> 19:5064. (IHC) <a href="#">PubMed</a></li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	

RRID AB\_2783235 (BioLegend Cat. No. 345521)  
AB\_2783236 (BioLegend Cat. No. 345522)

## Antigen Details

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<b>Structure</b>	B7 Immunoglobulin superfamily, 25 kD
<b>Distribution</b>	Dendritic cells, liver, few transformed cell lines, subset of macrophages
<b>Function</b>	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
<b>Ligand/Receptor</b>	PD-1
<b>Cell Type</b>	Dendritic cells
<b>Biology Area</b>	Costimulatory Molecules, Immunology
<b>Molecular Family</b>	CD Molecules, Immune Checkpoint Receptors
<b>Antigen References</b>	1. Carreno BM, <i>et al.</i> 2002. <i>Annu. Rev. Immunol.</i> 20:29. 2. Ohigashi Y, <i>et al.</i> 2005. <i>Clin. Cancer. Res.</i> 8:2947.
<b>Gene ID</b>	<a href="#">80380</a>

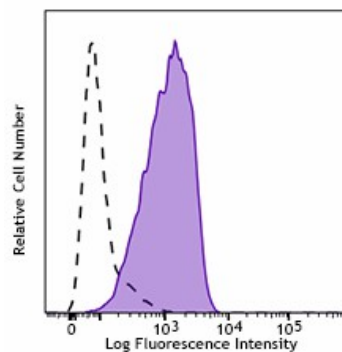
## Other Formats

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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

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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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