

Brilliant Violet 421™ anti-human CD273 (B7-DC, PD-L2) Antibody

Catalog# / Size	345519 / 25 tests 345520 / 100 tests
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 and BSA (origin USA).
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	<p>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 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.</p> <p>Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
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**
- (PubMed link indicates BioLegend citation)
1. Youngnak-Piboonratankit P, et al. 2004. *Immunol. Lett.* 94:215. (IHC, IF)
 2. Ohigashi Y, et al. 2005. *Clin. Cancer Res.* 8:2947. (IHC, IF)
 3. Hobo W, et al. 2010. *Blood* 25:4501. (FC)
 4. Nagamatsu T, et al. 2009. *Hum. Reprod.* 24:3160. (Block)
 5. Alvarez IB, et al. 2010. *J. Infect. Dis.* 202:524. (Block)
 6. Taube JM, et al. 2014. *Clin. Cancer Res.* 19:5064. (IHC) [PubMed](#)

RRID

AB_2750477 (BioLegend Cat. No. 345519)
AB_2750478 (BioLegend Cat. No. 345520)

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
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules, Immune Checkpoint Receptors
Antigen References	1. Carreno BM, et al. 2002. <i>Annu. Rev. Immunol.</i> 20:29. 2. Ohigashi Y, et al. 2005. <i>Clin. Cancer Res.</i> 8:2947.
Gene ID	80380

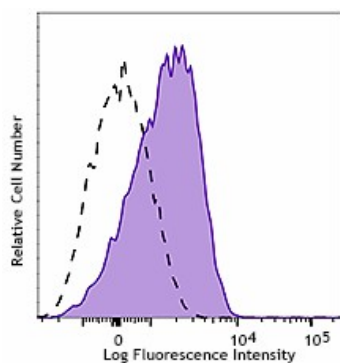
Related Protocols

[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) Brilliant Violet 421™ (filled histogram) or mouse IgG1, κ isotype control (open histogram).

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