

APC anti-human CD274 (B7-H1, PD-L1) Antibody

Catalog# / Size	393609 / 25 tests 393610 / 100 tests
Clone	MIH2
Regulatory Status	RUO
Other Names	Programmed cell death ligand 1, PD-L1, B7 homolog 1, B7-H1, B7-H, B7H1, PDL1, PDCD1L1, PDCD1LG1
Isotype	Mouse IgG1, κ
Description	CD274, also known as PD-L1 and B7-H1, is type I transmembrane glycoprotein that serves as a ligand for CD279 (PD-1). This interaction is believed to regulate the balance between the stimulatory and inhibitory signals needed for responses to microbes and maintenance of self-tolerance. CD274 is involved in the costimulation of T cell proliferation and IL-10 and IFN- γ production in an IL-2-dependent and CD279-independent manner. Conflicting data has shown that CD274 can inhibit T cell proliferation and cytokine production, and alternatively, enhance T cell activation. Other studies suggest that CD274 may signal bidirectionally, raising interesting implications for its expression in a wide variety of cell types, including T and B cells, antigen-presenting cells, and non-hematopoietic cells.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human PD-L1-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 APC 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	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 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
Excitation Laser	Red Laser (633 nm)
Product Citations	1. Xu X, <i>et al.</i> 2020. J Cell Biol. 219:00:00. PubMed 2. Wei J, <i>et al.</i> 2019. J Immunother Cancer. 7:209. PubMed
RRID	AB_2749926 (BioLegend Cat. No. 393609) AB_2749927 (BioLegend Cat. No. 393610)

Antigen Details

Structure	Type 1 transmembrane protein, member of the B7 family, 40 kD.
Distribution	T cells, B cells, NK cells, monocytes/macrophages, granulocytes and dendritic cells

Function	CD274 is involved in the costimulatory signal, essential for T lymphocyte proliferation and production of IL-10 and IFN- γ , in an IL-2-dependent and a PD-1-CD1-independent manner. Its interaction with PD-1-CD1 inhibits T-cell proliferation and cytokine production.
Ligand/Receptor	PD-1 (CD279), B7-1 (CD80).
Cell Type	T cells, B cells, NK cells, Monocytes, Macrophages, Granulocytes, Dendritic cells
Biology Area	Immunology, Cancer Biomarkers, Costimulatory Molecules
Molecular Family	Adhesion Molecules, CD Molecules, Immune Checkpoint Receptors
Antigen References	<ol style="list-style-type: none"> 1. Khan AR, <i>et al.</i> 2015. <i>Nat Commun.</i> 6:5997 2. Kiyasu J, <i>et al.</i> 2015. <i>Blood.</i> 126:2193 3. Herold M, <i>et al.</i> 2015. <i>J Immunol.</i> 195:3584 4. Buddhisa S, <i>et al.</i> 2015. <i>J Immunol.</i> 194:4413
Gene ID	29126

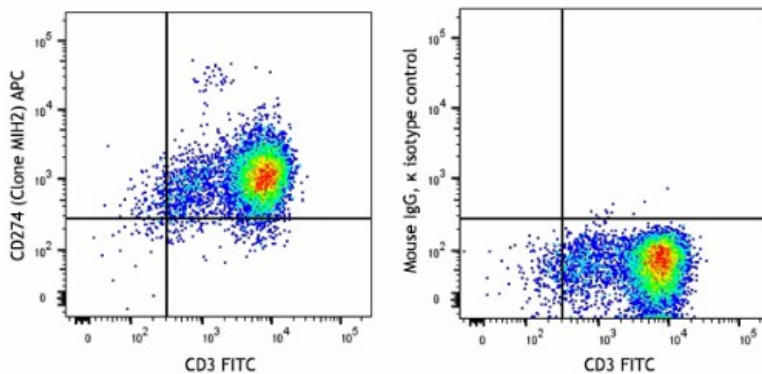
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Ultra-LEAF™ Purified anti-human CD274 (B7-H1, PD-L1), FITC anti-human CD274 (B7-H1, PD-L1), Purified anti-human CD274 (B7-H1, PD-L1), PE anti-human CD274 (B7-H1, PD-L1), APC anti-human CD274 (B7-H1, PD-L1)

Product Data



Human peripheral blood lymphocytes were activated for 3 days with PHA, and then stained with CD3 FITC and CD274 (clone MIH2) APC (left) or mouse IgG, κ APC isotype control (right).

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