

PerCP/Cyanine5.5 anti-mouse CD274 (B7-H1, PD-L1) Antibody

Catalog# / Size	124333 / 25 µg 124334 / 100 µg
Clone	10F.9G2
Regulatory Status	RUO
Other Names	B7-H1, PD-L1
Isotype	Rat IgG2b, κ
Description	CD274, also known as B7-H1 or programmed death ligand 1 (PD-L1), is a 40 kD type I transmembrane protein and a member of the B7 family within the immunoglobulin receptor superfamily. It is expressed on T cells, B cells, NK cells, dendritic cells, IFN-γ activated endothelial cells, and monocytes. B7-H1 is one of the ligands of PD-1. The interaction of B7-H1 with PD-1 plays an important role in the inhibition of T cell responses. Other studies have shown that B7-H1 is able to costimulate T cell growth and cytokine production. CD274 is involved in costimulation essential for T cell proliferation and production of IL-10 and IFN-γ, in an IL-2-dependent and a PD-1-independent manner. Its interaction with PD-1 inhibits T cell proliferation and cytokine production.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions.
Concentration	0.2 mg/ml
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 ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
Application Notes	Additional reported applications (for the relevant formats) include: immunofluorescence ⁴ , blocking ^{6,7,8,9} , and immunohistochemistry of acetone-fixed frozen sections ^{4, 11} . The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 124303). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 124318) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/µg).
Additional Product Notes	BioLegend is in the process of converting the name PerCP/Cy5.5 to PerCP/Cyanine5.5. The dye molecule remains the same, so you should expect the same quality and performance from our PerCP/Cyanine5.5 products. Contact Technical Service if you have any questions.
Application References	<ol style="list-style-type: none"> 1. Maier H, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:2714. 2. Meng Q, <i>et al.</i> 2006. <i>Invest. Ophthalmol. Vis. Sci.</i> 47:4444. PubMed 3. Scarlett UK, <i>et al.</i> 2012. <i>J Exp Med.</i> 209:495. PubMed 4. Grabie N, <i>et al.</i> 2007. <i>Circulation</i> 116:2062. (IF, IHC) 5. Paterson AM, <i>et al.</i> 2011. <i>J. Immunol.</i> 187:1097. 6. Channappanavar R, <i>et al.</i> 2012. <i>PLoS One</i> 7:e39757. (Block)
(PubMed link indicates BioLegend citation)	

7. Schreiber HA, *et al.* 2010. *PLoS One* 5:e11453. (Block) [PubMed](#)
8. Muthumani K, *et al.* 2011. *J. Immunol.* 187:2932. (Block) [PubMed](#)
9. Cripps JG, *et al.* 2010. *Hepatology* 52:1350. (Block) [PubMed](#)
10. Murakami R, *et al.* 2013. *PLoS One.* 8:73270. [PubMed](#)
11. Riella LV, *et al.* 2011. *Am. J. Transplant* 11:832-40. (IHC)
12. Lei GS, *et al.* 2015. *Infect Immun.* 83:572. [PubMed](#)

Product Citations

1. Rodriguez-García A, *et al.* 2021. *Nat Commun.* 12:877. [PubMed](#)
2. Wabitsch S, *et al.* 2021. *Cell Mol Gastroenterol Hepatol.* 12:1166. [PubMed](#)
3. Zhang Z, *et al.* 2021. *Oncoimmunology.* 10:1912472. [PubMed](#)
4. Liao YC, *et al.* 2021. *Front Immunol.* 12:743030. [PubMed](#)

RRID

AB_2629831 (BioLegend Cat. No. 124333)
 AB_2629832 (BioLegend Cat. No. 124334)

Antigen Details

Structure	40 kD type I transmembrane protein member of B7 family within the immunoglobulin receptor superfamily
Distribution	T cells, B cells, NK cells, dendritic cells, IFN- γ activated endothelial cells, and monocytes
Ligand/Receptor	PD-1 (PDCD1)
Cell Type	B cells, Dendritic cells, Endothelial cells, Monocytes, NK cells, T cells
Biology Area	Cancer Biomarkers, Costimulatory Molecules, Immunology
Molecular Family	Adhesion Molecules, CD Molecules, Immune Checkpoint Receptors
Antigen References	<ol style="list-style-type: none"> 1. Sharpe A, <i>et al.</i> 2007. <i>Nat. Immunol.</i> 8:239. 2. Dong H, <i>et al.</i> 1999. <i>Nat. Med.</i> 5:1365. 3. Freeman G, <i>et al.</i> 2000. <i>J. Exp. Med.</i> 192:1027.
Gene ID	60533

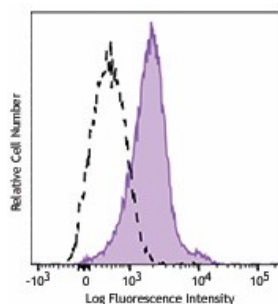
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-mouse CD274 (B7-H1, PD-L1), Biotin anti-mouse CD274 (B7-H1, PD-L1), PE anti-mouse CD274 (B7-H1, PD-L1), Brilliant Violet 421™ anti-mouse CD274 (B7-H1, PD-L1), APC anti-mouse CD274 (B7-H1, PD-L1), PE/Cyanine7 anti-mouse CD274 (B7-H1, PD-L1), Ultra-LEAF™ Purified anti-mouse CD274 (B7-H1, PD-L1), Brilliant Violet 711™ anti-mouse CD274 (B7-H1, PD-L1), Brilliant Violet 605™ anti-mouse CD274 (B7-H1, PD-L1), PE/Dazzle™ 594 anti-mouse CD274 (B7-H1, PD-L1), GolnVivo™ Purified anti-mouse CD274 (B7-H1, PD-L1), Brilliant Violet 785™ anti-mouse CD274 (B7-H1, PD-L1), PerCP/Cyanine5.5 anti-mouse CD274 (B7-H1, PD-L1), Brilliant Violet 650™ anti-mouse CD274 (B7-H1, PD-L1), PE/Cyanine5 anti-mouse CD274 (B7-H1, PD-L1), PE/Fire™ 640 anti-mouse CD274 (B7-H1, PD-L1), Spark Red™ 718 anti-mouse CD274 (B7-H1, PD-L1)

Product Data



C57BL/6 mouse splenocytes were stained with anti-mouse CD274 (clone 10F.9G2) PerCP/Cyanine5.5 (filled histogram) or rat IgG2b, κ PerCP/Cyanine5.5 isotype control (open histogram).

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