

GolnVivo™ Purified anti-mouse CD274 (B7-H1, PD-L1) Antibody

Catalog# / Size	124328 / 5 mg 124329 / 25 mg 124330 / 50 mg 124325 / 100 mg 124326 / 500 mg 124327 / 1 g
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	0.2 μm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <1.0 EU/mg of the protein. (<0.1 pg/μg of the protein) as determined by the LAL test.
Preparation	The GolnVivo™ antibody was purified by affinity chromatography.
Concentration	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL.
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. This GolnVivo™ solution contains no preservative; handle under aseptic conditions.
Application	FC - Quality tested 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 ≤ 1.0 μg per million cells in 100 μL volume or 100 μL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. For <i>in vivo</i> and <i>in vitro</i> applications, we recommend to perform a pilot experiment to determine the optimal concentration to use for each particular experiment.
Application Notes	GolnVivo™ products are guaranteed to be pathogen-free based on the IDEXX BioResearch IMPACT test via PCR. For a full listing of pathogens tested, visit the GolnVivo™ Webpage . Additional reported applications (for the relevant formats) include: immunofluorescence ⁴ and blocking ^{6,7,8,9} , and immunohistochemistry of acetone-fixed frozen sections ^{11, 12} .
Additional Product Notes	View more applications data for this product in our Scientific Poster Library .
Application References	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

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4. Grabie N, *et al.* 2007. *Circulation* 116:2062. (IF)
5. Paterson AM, *et al.* 2011. *J. Immunol.* 187:1097.
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11. Riella LV, *et al.* 2011. *Am. J. Transplant* 11:832-40. (IHC)
12. Grabie N, *et al.* 2007. *Circulation* 116:2062-71. (IHC)
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Product Citations

1. Bazan-Peregrino M, *et al.* 2021. *J Immunother Cancer.* 9:. [PubMed](#)
2. Chen H, *et al.* 2022. *J Immunother Cancer.* 10:. [PubMed](#)
3. Li D, *et al.* 2021. *Mol Cancer Ther.* 20:1926. [PubMed](#)
4. Li H, *et al.* 2021. *Nat Commun.* 12:2773. [PubMed](#)
5. Jaynes JM, *et al.* 2020. *Sci Transl Med.* 12:00. [PubMed](#)
6. Habib S, *et al.* 2018. *Infect Immun.* 86:e00019. [PubMed](#)
7. Janela B, *et al.* 2019. *Immunity.* 50:1069. [PubMed](#)
8. Wang C, *et al.* 2018. *Sci Transl Med.* 10. [PubMed](#)
9. Yamazaki K, *et al.* 2022. *Sci Rep.* 12:3242. [PubMed](#)

RRID

AB_2566281 (BioLegend Cat. No. 124328)
 AB_2566282 (BioLegend Cat. No. 124329)
 AB_2566283 (BioLegend Cat. No. 124330)
 AB_2566092 (BioLegend Cat. No. 124325)
 AB_2566093 (BioLegend Cat. No. 124326)
 AB_2566094 (BioLegend Cat. No. 124327)

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

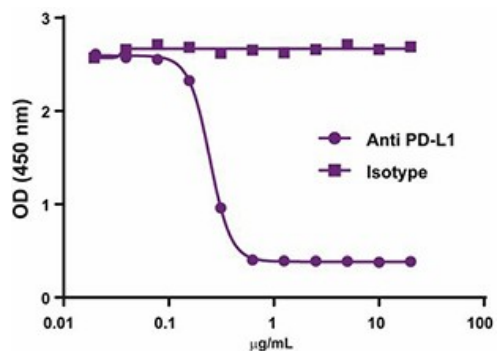
Related Protocols

[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



Anti-mouse PD-L1 inhibits the binding of PD-1 to immobilized PD-L1. A Immobilized recombinant PD-L1-Fc chimera (coated at 1 µg/mL) was pre-incubated with increasing concentrations of anti-mouse PD-L1 (clone 10F.9G2, purple circles) or isotype control (clone RTK4530, purple squares), followed by incubation with a fixed concentration of PD-1-Fc chimera (1 µg/mL). Clone 10F.9G2 inhibits PD-1/PD-L1 interaction in a dose dependent manner.

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