

Brilliant Violet 605™ anti-mouse CD274 (B7-H1, PD-L1)

Catalog # / Size: 1368030 / 50 µg

Clone: MIH6

Isotype: Rat IgG2a, κ

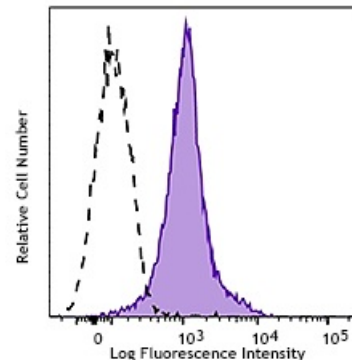
Immunogen: Mouse PD-L1-transfected cells

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Concentration: 0.2 mg/ml



C57BL/6 mouse splenocytes were stained with CD274 (B7-H1, PD-L1) (clone MIH6) Brilliant Violet 605™ (filled histogram) or rat IgG2a, κ Brilliant Violet 605™ isotype control (open histogram).

Applications:

Applications: Flow Cytometry

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 ≤ 0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.

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Application Notes: mAb MIH6 blocks the binding of mouse PD-L1 to PD-1 (CD279)

- Application References:**
1. Gassner FJ, *et al.* 2015. *Br J Haematol.* 170:515 (Block)
 2. Haile ST, *et al.* 2013. *J Immunol.* 191:2829 (FC)
 3. Hirahara K, *et al.* 2012. *Immunity.* 36:1017 (Block)
 4. Fife BT, *et al.* 2009. *Nat Immunol.* 10:1185 (Block)
 5. Kanai T, *et al.* 2003. *J Immunol.* 171:4156 (Block)

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.

Antigen
References:

1. Dorand RD. 2016. *Science*. 353:399.
2. Khan AR, et al. 2015. *Nat Commun*. 6:5997.
3. Kiyasu J, et al. 2015. *Blood*. 126:2193
4. Herold M, et al. 2015. *J Immunol*. 195:3584
5. Buddhisa S, et al. 2015. *J Immunol*. 194:4413