SONY

Product Data Sheet

Brilliant Violet 421™ anti-human CD274 (B7-H1, PD-L1)

Catalog # / Size: 2472535 / 25 tests
2472540 / 100 tests

Clone: MIH3

Isotype: Mouse IgG1, κ

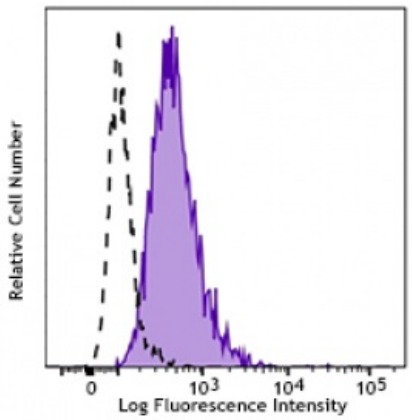
Immunogen: Human PD-L1-transfected cells.

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

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

Concentration: Lot-specific



Human PBMCs were activated for 3 days with PHA and then stained with CD274 (clone MIH3) Brilliant Violet 421™ (filled histogram) or mouse IgG1, κ Brilliant Violet 421™ 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 5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

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.

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Application Notes: Additional reported applications (for the relevant formats) include blocking[1, 2].

Clone MIH3 blocks the binding of PD-L1 with PD-1 , but did not block the binding of PD-L1 with B7-1 (CD80).

Application References:
1. Khan AR, *et al*. 2015. *Nat Commun*. 6:5997.
2. Kiyasu J, *et al*. 2015. *Blood*. 126:2193.
3. Herold M, *et al*. 2015. *J Immunol*. 195:3584.
4. Buddhisa S, *et al*. 2015. *J Immun*

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

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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.

Antigen References:

1. Khan AR, *et al*. 2015. *Nat Commun*. 6:5997.
2. Kiyasu J, *et al*. 2015. *Blood*. 126:2193.
3. Herold M, *et al*. 2015. *J Immunol*. 195:3584.
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