SONY

Product Data Sheet

Pacific Blue™ anti-mouse TCR Vβ5.1, 5.2

Catalog # / Size: 1297580 / 100 µg
1297575 / 25 µg

Clone: MR9-4

Isotype: Mouse IgG1, κ

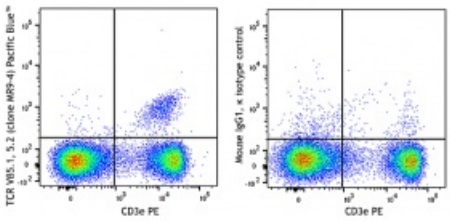
Immunogen: Murine T cell hybridoma 2HB51.8

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Pacific Blueâ„¢ under optimal conditions. The solution is free of unconjugated Pacific Blueâ„¢.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml



C57BL/6 splenocytes were stained with CD3ε PE and TCR Vβ5.1, 5.2 (clone MR9-4) Pacific Blue™ (left) or Mouse IgG1, κ Pacific Blue™ isotype control (right).

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.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes: Additional reported applications (for the relevant formats) include: Induction of proliferation of Vβ5.1$^+$ and Vβ5.2$^+$ T cells[2, 3] and *in vivo* depletion of Vβ5$^+$ T cells[4].

Application References:

1. Marrack P, *et al.* 2008. *Annu. Rev. Immunol.* 26:171.
2. Sim GK and Augustin AA. 1985. *Cell* 42:89.
3. Mami-Chouaib F, *et al.* 2002. *Immunol. Rev.* 188:114.

Description: Vβ5.1 and 5.2 T cell receptor (TCR Vβ5.1, 5.2) are variants of TCR β chain that, along with TCR α chain, forms the TCR heterodimer. In association with the CD3 complex, TCR α/β is responsible for antigen recognition in the MHC-Peptide complex and the initiation of T cell-mediated immune responses.

Antigen References:

1. Marrack P, *et al.* 2008. *Annu. Rev. Immunol.* 26:171.
2. Sim GK and Augustin AA. 1985. *Cell* 42:89.
3. Mami-Chouaib F, *et al.* 2002. *Immunol. Rev.* 188:114.

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