SONY

# Product Data Sheet

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

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

**Clone:** MR9-4

**Isotype:** Mouse IgG1, κ

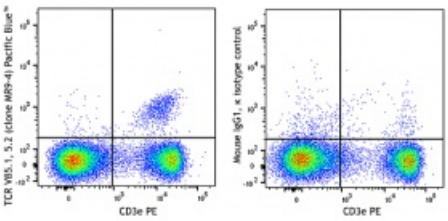
**Immunogen:** Murine T cell hybridoma 2HB51.8

**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.