SONY

Product Data Sheet

PerCP/Cy5.5 anti-mouse TCR Vβ5.1, 5.2

Catalog # / Size: 1297545 / 25 µg
1297550 / 100 µg

Clone: MR9-4

Isotype: Mouse IgG1, κ

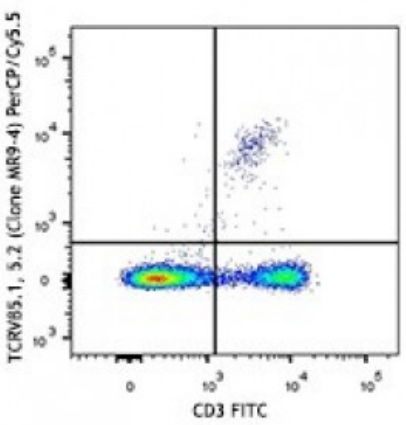
Immunogen: Murine T cell hybridoma 2HB51.8

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.

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

Concentration: 0.2



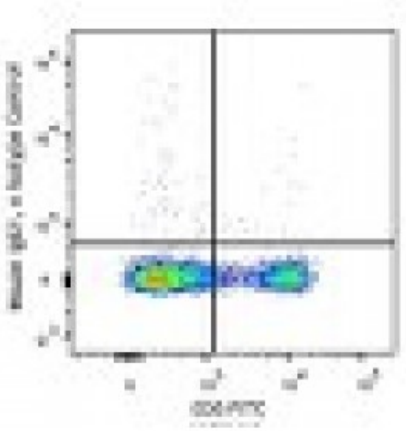
C57BL/6 splenocytes were stained with CD3 FITC and TCR Vβ5.1, 5.2 (clone MR9-4) PerCP/Cy5.5 (top) or mouse IgG1, κ PerCP/Cy5.5 isotype control (bottom).

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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.



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 cells4.

Application References:

1. Kanagawa O, *et al.* 1991. *J. Immunol.* 147:1307. (FC)
2. Kanagawa O, *et al.* 1992. *J. Immunol.* 149:9. (Activ)
3. Woodland DL, *et al.* 1993. *J. Exp. Med.* 177:433. (Activ)
4. Gelber C, *et al.* 1992. *Cancer Res.* 52:6507. (Deplete)

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

1. Marrack P, *et al.* 2008. *Annu. Rev. Immunol.* 26:171.

References: 2. Sim GK and Augustin AA. 1985. *Cell* 42:89.
3. Mami-Chouaib F, *et al.* 2002. *Immunol. Rev.* 188:114.