

Pacific Blue™ anti-mouse TCR Vγ1.1/Cr4

Catalog # / Size: 1305550 / 100 µg
1305545 / 25 µg

Clone: 2.11

Isotype: Hamster IgG

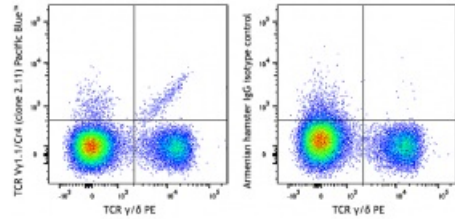
Immunogen: T3.13.1 T-cell hybridoma cell line

Reactivity: Mouse

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

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

Concentration: 0.5 mg/ml



C57BL/6 mouse splenocytes were stained with TCR γ/δ PE and TCR Vγ1.1 (clone 2.11) Pacific Blue™ (left) or Armenian hamster IgG 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: immunoprecipitation¹.

Application References: 1. Pereira P, *et al.* 1995. *J. Exp. Med.* 182:1921.
2. Grigoriadou K, *et al.* 2002. *J. Immunol.* 169:3736.

Description: T cell receptor (TCR) is a heterodimer consisting of an α and β chain (TCR α/β) or a γ and δ chain (TCR γ/δ). TCR associates with CD3 to form a CD3/TCR complex. The CD3/TCR plays a key role in antigen recognition, signal transduction, and T cell activation. TCR Vγ1.1 (Garman nomenclature) is also called TCR Vγ1 (Tonegawa nomenclature). The Vγ1 gene almost exclusively rearranges to the Jγ4-Cγ4 gene. Vγ1- Jγ4-Cγ4 expressing cells constitute a major population of γ/δ T cells in thymus and peripheral lymphoid organs in adult mice, but they are only composed of a minor population of γ/δ T cells during fetal and early postnatal life. Vγ1 T cell development can happen in thymus-dependent and thymus-independent manners. Further studies have shown that the antibody 2.11 recognized epitope is located in Cr4 domain.

- Antigen** 1. Pereira P, et al. 1995. *J. Exp. Med.* 182:1921.
- References:** 2. Grigoriadou K, et al. 2002. *J. Immunol.* 169:3736.