Product Data Sheet

FITC anti-mouse TCR Vγ1.1/Cr4

Catalog # / Size: 1305515 / 25 µg

1305520 / 100 µg

Clone:

Isotype: Hamster IgG

T3.13.1 T-cell hybridoma cell line Immunogen:

Reactivity: Mouse

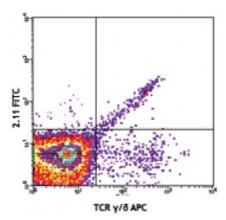
Preparation: The antibody was purified by affinity

chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



C57BL/6 mouse lymph node cells were stained with anti-mouse TCR γ/δ (clone GL3) APC and anti-mouse TCR Vv1.1 (clone 2.11) FITC (top) or Armenian hamster IgG FITC isotype control (bottom).

Applications:

Applications: Flow Cytometry

Recommended

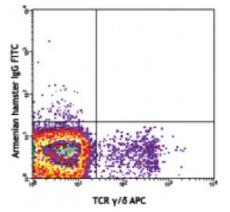
Usage:

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.

Application Notes: Additional reported applications (for the

relevant formats) include: immunoprecipitation1.



Application References: 1. Pereira P, et al. 1995. J. Exp. Med. 182:1921. (IP)

2. Pereira P and Boucontet L. 2004. J. Immunol. 173:3261. (FC)

3. Pereira P, et al. 1996. Intl. Immunol. 8:83. (FC) 4. Jaffar Z, et al. 2011. J. Immunol. 187:5380. PubMed 5. Guo Y, et al. 2013. Infect immun. 81:3923. PubMed

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 Vy1.1 (Garman nomenclature) is also called TCR Vy1 (Tonegawa nomenclature). The $V\gamma 1$ 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. Vy1 T cell development can happen in thymus-dependent and thymusindependent manners. Further studies have shown that the antibody 2.11

recognized epitote is located in Cr4 domain.

Antigen References:

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