

PE anti-human TCR Vα7.2

Catalog # / Size: 2358525 / 25 tests
2358530 / 100 tests

Clone: 3C10

Isotype: Mouse IgG1, κ

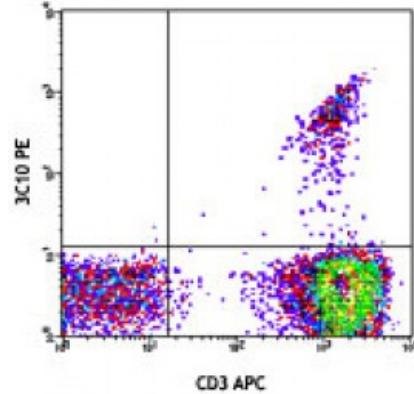
Immunogen: Recombinant TCR

Reactivity: Human

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

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific

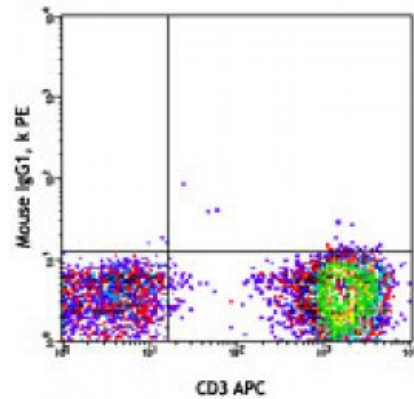


Human peripheral blood lymphocytes stained with CD3 APC and TCR Vα7.2 (clone 3C10) PE (top), or mouse IgG1, κ isotype control (bottom).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



Application Notes: Associated with an anti-CD161 or -IL18Rα staining, the 3C10 antibody allows unequivocal identification of MAIT cells. Importantly, the Vα7.2 segment can also be used by conventional T cells. Therefore, the 3C10 also stains a subset of conventional CD4 and CD8 T cells.

Application References: 1. Martin E, *et al.* 2009. *PLoS Biol.* 7:525.
2. Wakao H, *et al.* 2013. *Cell Stem Cell* 12:1. [PubMed](#)

Description: The 3C10 antibody recognizes the Vα7.2 T cell antigen receptor (TCR) α-chain segment which, joined with the Ja33 segment, constitutes an invariant TCR that is a characteristic of the mucosal-associated invariant T cells (MAIT cells). MAIT cells are restricted by a nonpolymorphic class Ib major histocompatibility complex (MHC) molecule, MHC-related molecule 1 (MR1). MAIT cells are present in human blood (1-8% of T cells), mesenteric lymph nodes, liver, and intestinal mucosa.

MAIT cells play a role in detecting and fighting off microbial infections.

**Antigen
References:**

1. Le Bourhis L, *et al.* 2010. *Nat. Immunol.* 11:701.