SONY

Product Data Sheet

Brilliant Violet 421™ anti-human TCR Vα7.2

Catalog # / Size: 2358580 / 100 tests
2358575 / 25 tests

Clone: 3C10

Isotype: Mouse IgG1, κ

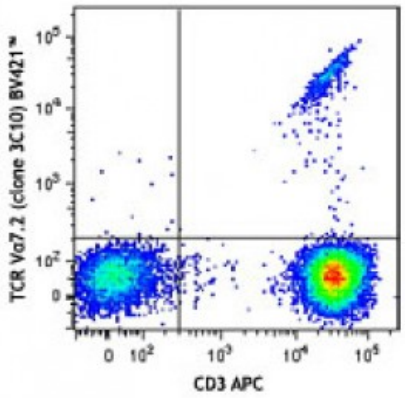
Immunogen: Recombinant TCR

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

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

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD3 APC and TCR Vα7.2 (clone 3C10) Brilliant Violet 421™ (top) or mouse IgG1, κ Brilliant Violet 421™ 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 ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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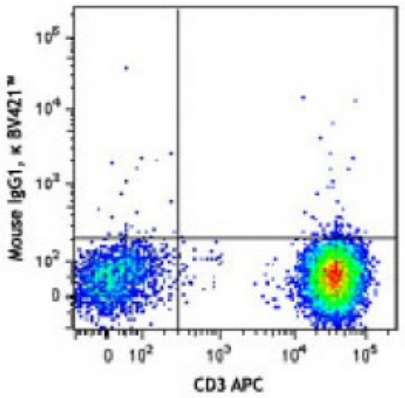

Application Notes: Associated with an anti-CD161 or -IL18Rα staining, the 3C10 antibody allows unequivocal identification of MAIT cells. Importantly, the Vα7.2 segment can also be used by conventional T cells. Therefore, the 3C10 also stains a subset of conventional CD4 and CD8 T cells.

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 Jα33 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.