

**Brilliant Violet 421™ anti-human TCR γ/δ**

**Catalog # / Size:** 2256085 / 25 tests  
2256090 / 100 tests

**Clone:** B1

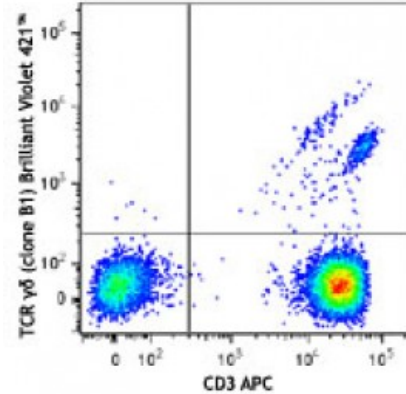
**Isotype:** Mouse IgG1, κ

**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 γ/δ (clone B1) Brilliant Violet 421™ (top) or mouse IgG1, κ Brilliant Violet 421™ isotype control (bottom).

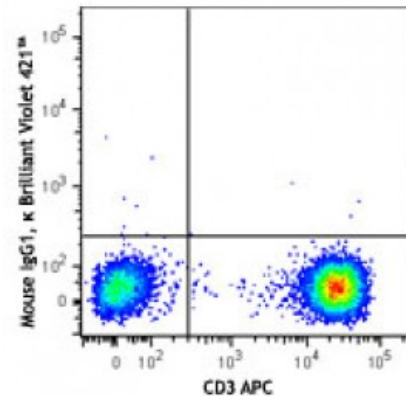
**Applications:**

**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** Clone B1 is also known as clone B1.1.

**Notes:**

Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections<sup>3</sup> and paraffin-embedded sections<sup>5</sup>, and *in vitro* blocking. The LEAF™ purified antibody (Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for functional assays (Cat. No. 100208).

**Application**

**References:**

1. Rodriguez-Gago M, *et al.* 2001. *Transplantation*. 72:503.
2. Lehmann FS, *et al.* 2002. *Am. J. Physiol. Gastrointest. Liver. Physiol.* 283:G481. (FC)
3. Bordignon M, *et al.* 2008. *Mol. Med. Rep.* 1:485. (IHC)
4. Conrad M, *et al.* 2007. *Cytom. Part A* 71A:925. (FC)
5. Pollinger B, *et al.* 2011. *J. Immunol.* 186:2602. (IHC)
6. Correia DV, *et al.* 2011. *Blood*. 118:992. (Block)
7. Laurent AJ, *et al.* 2014. *PLoS One*. 9:103683. [PubMed](#)

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**Description:**

T cell receptor (TCR) is a heterodimer consisting of an α and a β chain (TCR α/β) or a γ and a δ chain (TCR γ/δ). TCR γ/δ is involved in the recognition of certain bacterial, self-CD1 molecule, and tumor antigens bound to MHC class I. The γ/δ TCR associates with CD3 and is expressed on a subset of T cells found in the thymus, the intestinal epithelium, and the peripheral lymphoid tissues and peritoneum. Most γ/δ T cells are CD4<sup>-</sup>/CD8<sup>-</sup>, some are CD8<sup>+</sup>. T cells expressing the γ/δ TCR have been shown to play a role in oral tolerance, innate immune response for some tumor cells, and autoimmune disease. It has been reported that γ/δ T cells also play a principal role in antigen presentation.

**Antigen**

**References:**

1. Lanier LL, *et al.* 1987. *J. Clin. Immunol.* 7:429.
2. Spencer J, *et al.* 1989. *Eur. J. Immunol.* 19:1335.
3. Uyemura K, *et al.* 1991. *J. Exp. Med.* 174:683.
4. Spada FM, *et al.*