

**Brilliant Violet 510™ anti-human TCR γ/δ**

**Catalog # / Size:** 2256100 / 100 tests  
2256095 / 25 tests

**Clone:** B1

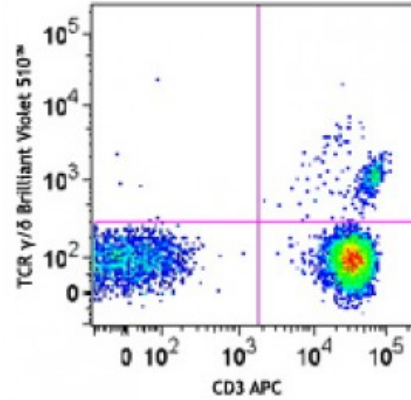
**Isotype:** Mouse IgG1, κ

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ and unconjugated antibody.

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

**Concentration:** Lot-specific

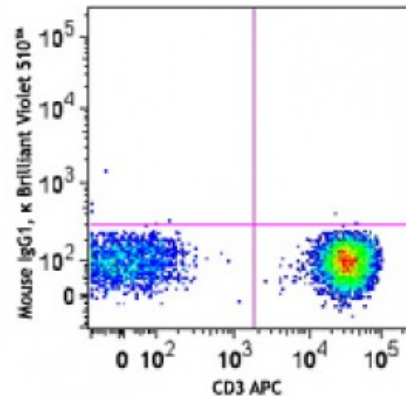


Human peripheral blood lymphocytes were stained with CD3 APC and TCR γ/δ (clone B1) Brilliant Violet 510™ (top) or mouse IgG1, κ Brilliant Violet 510™ isotype control (bottom).

**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 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.

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purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**Application Notes:** Clone B1 is also known as clone B1.1.

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.*