

**APC/Fire™ 750 anti-human TCR γ/δ**

**Catalog # /** 2256140 / 100 tests  
**Size:** 2256135 / 25 tests

**Clone:** B1

**Isotype:** Mouse IgG1, κ

**Immunogen:** Purified human β2-microglobulin

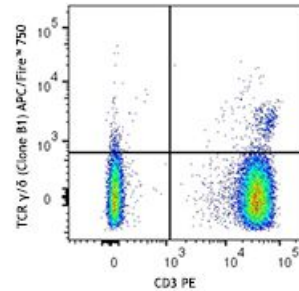
**Reactivity:** Human, Non-human primate, Other

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC/Fire™

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

**Workshop Number:** 750 under optimal conditions.

**Concentration:** Lot-specific



Human peripheral blood lymphocytes were stained with CD3 PE and TCR γ/δ (clone B1) APC/Fire™ 750 (top) or mouse IgG1, κ APC/Fire™ 750 isotype control (bottom).

**Applications:**

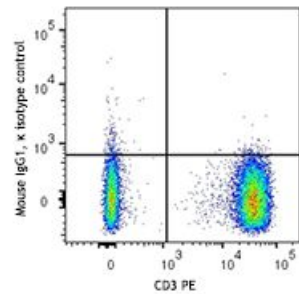
**Applications:** Flow Cytometry

**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 μl per million cells in 100 μl staining volume or 5 μl per 100 μl of whole blood.

\* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

**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 Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for highly sensitive assays (Cat. Nos. 331235 and 331236).



**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  $\alpha$  and a  $\beta$  chain (TCR  $\alpha/\beta$ ) or a  $\gamma$  and a  $\delta$  chain (TCR  $\gamma/\delta$ ). TCR  $\gamma/\delta$  is involved in the recognition of certain bacterial, self-CD1 molecule, and tumor antigens bound to MHC class I. The  $\gamma/\delta$  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  $\gamma/\delta$  T cells are CD4<sup>-</sup>/CD8<sup>-</sup>, some are CD8<sup>+</sup>. T cells expressing the  $\gamma/\delta$  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  $\gamma/\delta$  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. 2000. *J. Exp. Med.* 191:907.