

**PE anti-human TCR  $\gamma/\delta$** 

**Catalog # / Size:** 2256050 / 100 tests  
2256045 / 25 tests

**Clone:** B1

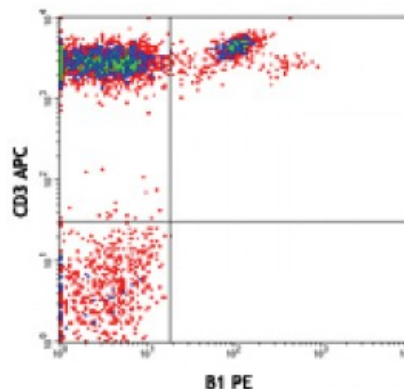
**Isotype:** Mouse IgG1,  $\kappa$

**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 (UCHT1) APC and B1 PE

**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:** 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/ $\mu$ g, Azide-Free, 0.2  $\mu$ m 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](#)

**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.*