## **Product Data Sheet**

### PE/Fire<sup>™</sup> 700 anti-human TCR γ/δ

2256190 / 100 tests Catalog # /

Size: 2256185 / 25 tests

Clone: **B1** 

Isotype: Mouse IgG1, ĸ

Purified human \( \beta^2\)-microglobulin Immunogen:

Reactivity: Human, Non-human primate, Other

The antibody was purified by affinity Preparation:

chromatography and conjugated with

PE/Fire™ 700 under optimal

conditions.

Formulation: Phosphate-buffered solution, pH 7.2.

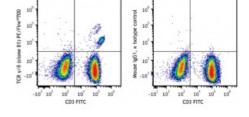
containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA)

Workshop **Number:** 

750 under optimal conditions.

**Concentration:** Lot-specific



Human peripheral blood lymphocytes were stained with anti-human CD3 FITC and antihuman TCR γ/δ PE/Fire™ 700 (clone B1) (left) or mouse IgG1, κ PE/Fire™ 700 isotype control (right).

### **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  $\mu L$  staining volume or 5  $\mu L$  per

100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for

each application.

\* PE/Fire™ 700 has a maximum excitation of 565 nm and a maximum

emission of 695 nm.

**Application** Notes:

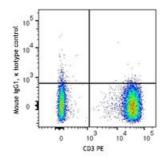
Clone B1 is also known as clone B1.1.

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

#### **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-/CD8-, some are CD8+. 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.