### **Product Data Sheet**

#### PE/Fire™ 640 anti-mouse CD25

**Catalog #** / 1110360 / 100 μg

Size:

Clone: PC61

Isotype: Rat IgG1,  $\lambda$ 

Immunogen: IL-2-dependent cytolytic mouse T-

cell clone B6.1

Reactivity: Mouse

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with

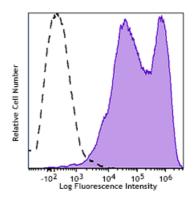
PE/Fire™ 640 under optimal

conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide

Concentration: 0.2 mg/mL



Con A-stimulated (3 days) C57BL/6 mouse splenocytes were stained with anti-mouse CD25 (clone PC61) PE/Fire™ 640 (filled histogram) or were left unstained (open histogram).

#### **Applications:**

**Applications:** Flow Cytometry

Recommended

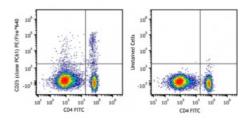
**Usage:** 

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  $\leq 0.25~\mu g$  per million cells in 100  $\mu L$  volume. It is recommended that the reagent be titrated for optimal performance for each

application.

\* PE/Fire™ 640 has a maximum excitation of 566 nm and a maximum

emission of 639 nm.



C57BL/6 mouse splenocytes were stained with anti-mouse CD4 FITC and anti-mouse CD25 (clone PC61) PE/Fire™ 640 (left) or CD4 FITC only (right).

## Application Notes:

Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>1,2</sup>, *in vitro* blocking of IL-2 binding to low- and high-affinity receptors 1-4, growth inhibition of IL-2-dependent T-cell lines<sup>1-4</sup>, in vivo depletion of CD25+CD4+ Treg cells<sup>5-8,10</sup>, and immunohistochemical staining of acetone-fixed frozen sections<sup>2</sup>. PC61 antibody recognizes a different epitope than 3C7 antibody (Cat. No. 101902). For in vivo studies or highly sensitive assays, we recommend Ultra-LEAF<sup>™</sup> purified antibody (Cat. No. 102040) with endotoxin < 0.01EU/µg, Azide-Free, 0.2 µm filtered.

# Application References:

- 1. Lowenthal JW, et al. 1985. Nature 315:669. (IP, Block)
- 2. Ceredig R, et al. 1985. Nature 314:98. (IP, IHC, Block)
- 3. Lowenthal JW, et al. 1985. J. Immunol. 135:3988. (Block)
- 4. Moreau JL, et al. 1987. Eur. J. Immunol. 17:929. (Block)
- 5. Takahashi T, et al. 2000. J. Exp. Med. 192:303. (Deplete)
- 6. Onizuka S, et al. 1999. Cancer Res. 59:3128. (Deplete)
- 7. Lei TC, et al. 2005. Blood 105:4865. (Deplete)
- 8. Pasare C, et al. 2004. Immunity 21:733. (Deplete)
- 9. León-Ponte M, et al. 2007. Blood 109:3139.
- 10. Cao OW, et al. 2007. Blood doi:10.1182/blood-2007-02-073304. (Deplete)
- 11. Benson MJ, et al. 2007. J. Exp. Med. doi:10.1084/jem.20070719.
- 12. Liu F, et al. 2011. Arch Toxicol. 85:1383. PubMed
- 13. Anguela XM, et al. 2013. Diabetes. 62:551. PubMed

#### **Description:**

CD25 is a 55 kD glycoprotein also known as the low affinity IL-2R $\alpha$ , Ly-43, p55, or Tac. It is expressed on activated T and B cells, thymocyte subsets, pre-B cells, and T regulatory cells. In association with CD122 (IL-2R $\beta$ ) and CD132 (common  $\gamma$  chain), CD25 forms the high affinity signaling IL-2 receptor.

## Antigen References:

- 1. Taniguchi T, et al. 1993. Cell 73:5-8.
- 2. Waldmann TA. 1991. J Biol Chem. 266:2681-4.
- 3. Read S, et al. 2000. J Exp Med. 192:295-302.
- 4. Lowenthal JW, et al. 1985. J Immunol. 135:3988-94.