#### **Brilliant Violet 605™ anti-mouse CD25**

Catalog # / Size: 1110175 / 125 µl

1110180 / 50 μg

Clone:

Isotype: Rat IgG1, λ

IL-2-dependent cytolytic mouse T-cell Immunogen:

clone B6.1

Reactivity: Mouse

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

chromatography and conjugated with Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ and

unconjugated antibody.

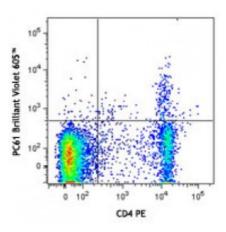
Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

**Concentration:** microg sizes: 0.2 mg/ml

microL sizes: lot-specific



C57BL/6 mouse splenocytes were stained with CD4 PE and CD25 (clone PC61) Brilliant Violet 605™.

### **Applications:**

**Applications:** Flow Cytometry

Recommended

**Usage:** 

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining using the microg size, the suggested use of this reagent is  $\leq 0.3$  microg per million cells in 100 microL volume. For immunofluorescent staining using the microL size, 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 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 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 605<sup>™</sup> is a trademark of Sirigen Group Ltd.

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**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<sup>1-4</sup>, growth inhibition of IL-2-dependent T-cell lines<sup>1-4</sup>, *in vivo* depletion of CD25<sup>+</sup>CD4<sup>+</sup> Treg cells<sup>5-8,10</sup>, and immunohistochemical staining of acetonefixed frozen sections2. PC61 antibody recognizes a different epitope than 3C7 antibody (Cat. No. 101902). The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No.

102014). For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 102040) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

# 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. Singh K, et al. 2015. Sci Rep. 14:7767. 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.
- 2. Waldmann TA. 1991. J. Biol. Chem. 266:2681.
- 3. Read S, et al. 2000. J. Exp. Med. 192:295.
- 4. Lowenthal JW, et al. 1985. J. Immunol.