SONY

# Product Data Sheet

## Brilliant Violet 605™ anti-mouse CD25

**Catalog # / Size:** 1110180 / 50 µg
1110175 / 125 µl

**Clone:** PC61

**Isotype:** Rat IgG1, λ

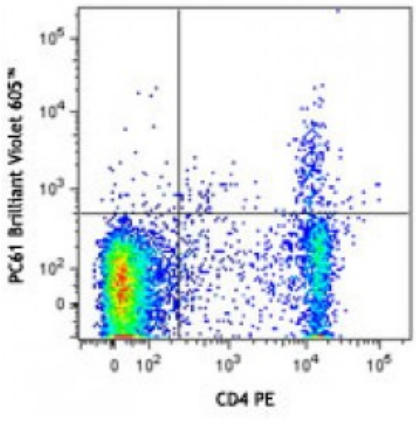
**Immunogen:** IL-2-dependent cytolytic mouse T-cell clone B6.1

**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 ≤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™ is a trademark of Sirigen Group Ltd.

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**Application Notes:** Additional reported applications (for the relevant formats) include: immunoprecipitation[1,2], *in vitro* blocking of IL-2 binding to low- and high-affinity receptors[1-4], growth inhibition of IL-2-dependent T-cell lines[1-4], *in vivo* depletion of $CD25^+CD4^+$ Treg cells[5-8,10], and immunohistochemical staining of acetone-fixed 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


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**Description:** CD25 is a 55 kD glycoprotein also known as the low affinity IL-2Rα, 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-2Rβ) and CD132 (common γ 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.*