SONY

Product Data Sheet

Brilliant Violet 421™ anti-mouse CD25

Catalog # / Size: 1110215 / 50 µg
1110165 / 125 µl
1110170 / 500 µl

Clone: PC61

Isotype: Rat IgG1, λ

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

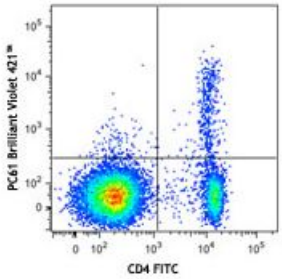
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Workshop Number: 750 under optimal conditions.

Concentration: Lot-specific



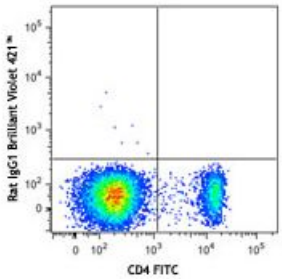
C57BL/6 mouse splenocytes were stained with CD4 FITC and CD25 (clone PC61) Brilliant Violet 421™ (top) or rat IgG1, κ Brilliant Violet 421™ isotype control (bottom).

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 µg size, the suggested use of this reagent is ≤0.125 µg per million cells in 100 µl volume. For immunofluorescent staining using µl sizes, the suggested use of this reagent is ≤5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.



For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.
Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

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. Leon-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-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.* 135:3988.

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.