SONY

Product Data Sheet

Brilliant Violet 421™ anti-mouse IL-10

Catalog # / Size: 3125105 / 125 µl
3125110 / 50 µg

Clone: JES5-16E3

Isotype: Rat IgG2b, κ

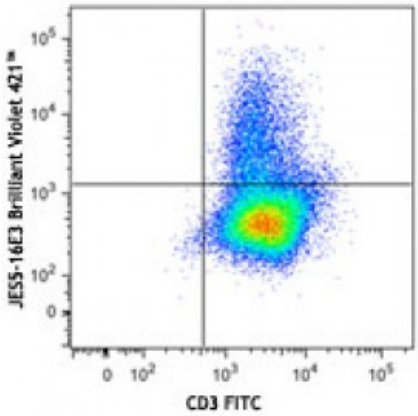
Immunogen: *E. coli*-expressed, recombinant mouse IL-10

Reactivity: Mouse

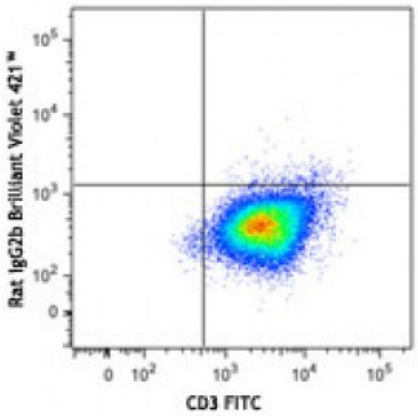
Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

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



PMA+ionomycin-stimulated Th2-polarized C57BL/6 mouse splenocytes (in the presence of monensin) were stained with CD3 FITC, fixed, permeabilized, and then stained with IL-10 (clone JES5-16E3) Brilliant Violet 421™ (top) or rat IgG2b Brilliant Violet



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 ≤0.5 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 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.

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resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

Application Notes:

ELISA or ELISPOT Detection[1,9,11]: The biotinylated JES5-16E3 antibody is useful as a detection antibody for a sandwich ELISA or ELISPOT assay, when used in conjunction with purified JES5-2A5 antibody (Cat. No. 504902/504904) as the capture antibody.

Neutralization[14]: The LEAF™ purified JES5-16E3 antibody can neutralize the bioactivity of natural or recombinant IL-10.

Flow Cytometry3: The fluorochrome-labeled JES5-16E3 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IL-10-producing cells within mixed cell populations.

Additional reported applications (for relevant formats) include: immunohistochemistry3.

Application References:

1. Simkin G, *et al.* 2000. *J. Immunol.* 164:2457.
2. Kitagaki K, *et al.* 2002. *Clin. Diagn. Lab Immunol.* 9:1260.
3. Khanna A, *et al.* 2000. *J. Immunol.* 164:1346.
4. Sander B, *et al.* 1993. *J. Immunol. Methods* 166:201.
5. Litton M, *et al.* 1994. *J. Immunol. Methods* 175:47.
6. Andersson U, *et al.* 1999. *Detection and qunatification of gene expression.* New York:Springer-Verlag.
7. Finkelman F, *et al.* 2003. *Curr. Prot. Immunol.* John Wiley & Sons New York. Unit 6.28.
8. Wang W, *et al.* 2004. *FASEB J.* 18:1043.
9. Brummel R and Lenert P. 2005. *J. Immunol.* 174:2429.
10. Lawson BR, *et al.* 2007. *J. Immunol.* 178:5366.
11. Xu G, *et al.* 2007. *J. Immunol.* 179:5358. PubMed
12. Brummel R, *et al.* 2005. *J. Immunol.*174:2429. PubMed
13. Kang YJ, *et al.* 2007. *Stem Cells* 25:1814. PubMed
14. Seo N, *et al*. 2001*. Immunology*. 103:449. (Neut)

Description: IL-10 was originally described as Cytokine Synthesis Inhibitory Factor (CSIF) by virtue of its ability to inhibit cytokine production by Th1 clones. IL-10 shares over 80% sequence homology with the Epstein-Barr virus protein BCRFI. IL-10 inhibits IFN-γ, TNF-β, and IL-2 production by Th1 clones; inhibits macrophage-mediated IL-1, IL-6, and TNF-α synthesis; suppresses the delayed type hypersensitivity response; stimulates Th2 cell response (which results in elevated antibody production); and promotes mast cell proliferation in combination with IL-4.

Antigen References:

1. Fitzgerald K, *et al.* Eds. 2001. The Cytokine FactsBook. Academic Press San Diego.
2. de Waal-Malefy R, *et al.* 1992. *Curr. Opin. Immunol.* 4:314.
3. Howard M, *et al.* 1992. *Immunol. Today* 13:198.