

**Brilliant Violet 421™ anti-human IL-10**

**Catalog # / Size:** 3107105 / 25 tests  
3107110 / 100 tests

**Clone:** JES3-9D7

**Isotype:** Rat IgG1, κ

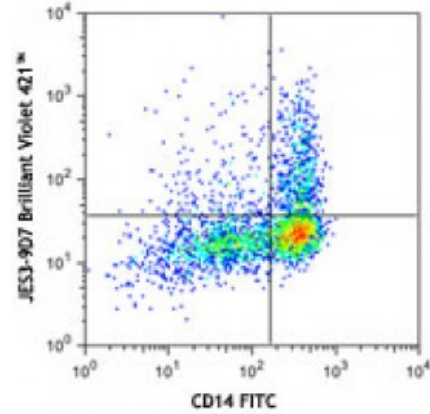
**Immunogen:** COS - expressed, recombinant human IL-10

**Reactivity:** Human

**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:** Lot-specific

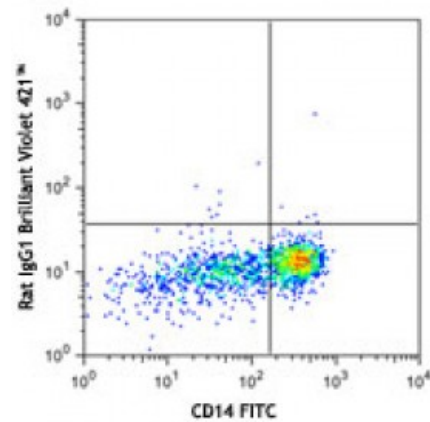


Human peripheral blood mononuclear cells were stimulated overnight with LPS (in the presence of monensin), stained with CD14 FITC, fixed, permeabilized, and then stained with IL-10 (clone JES3-9D7) Brilliant Violet 421™ (top) or rat IgG1, κ B

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, 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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U.S. Patent(s), pending patent applications and foreign equivalents.

**Application Notes:** **ELISA Capture<sup>1-5</sup> or ELISPOT Capture<sup>6</sup>:** The purified JES3-9D7 antibody is useful as the capture antibody in a sandwich ELISA, when used in conjunction with the biotinylated JES3-12G8 antibody (Cat. No. 501502) as the detecting antibody and recombinant human IL-10 (Cat. No. 571009) as the standard. The LEAF™ purified antibody is suggested for ELISPOT capture.

**Neutralization<sup>1-3,9</sup>:** The LEAF™ purified antibody (Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for neutralization of human IL-10 bioactivity (Cat. No. 501407). The JES3-9D7 antibody can neutralize the bioactivity of natural or recombinant IL-10.

**Additional reported applications (for the relevant formats) include:** immunohistochemical staining<sup>12</sup>.

**Note:** For testing human IL-10 in serum or plasma, BioLegend's ELISA Max™ Sets (Cat. No. 430601 to 430606) are specially developed and recommended. The JES3-9D7 antibody reacts with human and viral interleukin-10 (IL-10).

**Application References:**

1. Abrams J, *et al.* 1992. *Immunol. Rev.* 127:5. (ELISA Capture, Neut)
2. Gotlieb W, *et al.* 1992. *Cytokine* 4:385. (ELISA Capture, Neut)
3. Yssel H, *et al.* 1992. *J. Immunol.* 149:2378. (ELISA Capture, Neut)
4. Abrams J. 1995. *Curr. Prot. Immunol.* John Wiley and Sons New York. Unit 6.20. (ELISA Capture)
5. Burdin N, *et al.* 1993. *J. Exp. Med.* 177:295. (ELISA Capture)
6. Klinman D, *et al.* 1994. *Curr. Prot. Immunol.* John Wiley and Sons New York. Unit 6.19. (ELISPOT Capture)
7. Schaeferli P, *et al.* 2000. *J. Exp. Med.* 192:1553.
8. Jason J, *et al.* 1999. *Clin. Diagn. Lab Immunol.* 6:73.
9. Akdis CA, *et al.* 1998. *J. Clin. Invest.* 102:98. (Neut)
10. Stary G, *et al.* 2011. *J. Immunol.* 186:103. [PubMed](#)
11. Mason GM, *et al.* 2012. *PNAS.* [PubMed](#)
12. Smith DR, *et al.* 1994. *Am. J. Pathol.* 145:18. (IHC)
13. Stanicic DI, *et al.* 2014. *J Infect Dis.* 210:295. [PubMed](#)

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**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 BCRF1. The biological activities of IL-10 include inhibition of macrophage-mediated cytokine synthesis, suppression of the delayed type hypersensitivity response, and stimulation of the Th2 cell response, which results in elevated antibody production.

**Antigen References:**

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