

## PE/Dazzle™ 594 anti-mouse IL-10 Antibody

<b>Catalog# / Size</b>	505033 / 25 µg 505034 / 100 µg
<b>Clone</b>	JES5-16E3
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Interleukin-10, Cytokine synthesis inhibitory factor (CSIF), B cell derived T cell growth factor (B-TCGF)
<b>Isotype</b>	Rat IgG2b, κ
<b>Description</b>	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. 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.

### Product Details

<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	<i>E. coli</i> -expressed, recombinant mouse IL-10
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.
<b>Concentration</b>	0.2 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">intracellular immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤0.125 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.  * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	<b>ELISA or ELISPOT Detection<sup>1,9,11</sup>:</b> 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. Nos. 504902 & 504904) as the capture antibody. <b>ELISA Capture:</b> The purified JES5-16E3 antibody is useful as the capture antibody in a sandwich ELISA when used in conjunction with the biotinylated JES5-2A5 antibody (Cat. No. 505003) as the detection antibody and recombinant mouse IL-10 (Cat. No. 575809) as the standard. <b>Neutralization<sup>14</sup>:</b> The Ultra-LEAF™ purified JES5-16E3 antibody can neutralize the bioactivity of natural or recombinant IL-10. <b>Flow Cytometry<sup>3</sup>:</b> 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. <b>Additional reported applications (for relevant formats) include:</b> immunohistochemistry <sup>3</sup> .
<b>Application References</b>	1. Simkin G, <i>et al.</i> 2000. <i>J. Immunol.</i> 164:2457.

**(PubMed link indicates BioLegend citation)**

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.
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6. Andersson U, *et al.* 1999. *Detection and quantification 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.
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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)

**Product Citations**

1. Marques RM, *et al.* 2021. *Cell Death Differ.* 28:3140. [PubMed](#)
2. Palathingal Bava E, *et al.* 2022. *JCI Insight.* 7:. [PubMed](#)

**RRID**

AB\_2566328 (BioLegend Cat. No. 505033)  
AB\_2566329 (BioLegend Cat. No. 505034)

## Antigen Details

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<b>Structure</b>	Acid-labile cytokine, dimer, 17-21 kD (Mammalian)
<b>Cell Sources</b>	Activated CD8 <sup>+</sup> T cells, Th0, Th2 subset of CD4 <sup>+</sup> T cells, Ly-1 <sup>+</sup> B cells, monocytes, macrophages, keratinocytes
<b>Cell Targets</b>	T cells, B cells, mast cells, macrophages
<b>Receptors</b>	IL-10R (CDw210)
<b>Cell Type</b>	Tregs
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	Cytokines/Chemokines
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Fitzgerald K, <i>et al.</i> Eds. 2001. <i>The Cytokine FactsBook.</i> Academic Press San Diego.</li><li>2. de Waal-Malefy R, <i>et al.</i> 1992. <i>Curr. Opin. Immunol.</i> 4:314.</li><li>3. Howard M, <i>et al.</i> 1992. <i>Immunol. Today</i> 13:198.</li><li>4. Quesniaux V. 1992. <i>Res. Immunol.</i> 143:385.</li><li>5. Norton SK, <i>et al.</i> 2008. <i>J. Immunol.</i> 180:2848.</li></ol>
<b>Regulation</b>	Downregulated by IL-4, IL-10
<b>Gene ID</b>	<a href="#">16153</a>

## Related Protocols

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[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

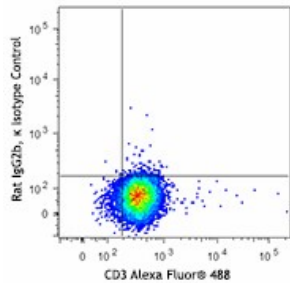
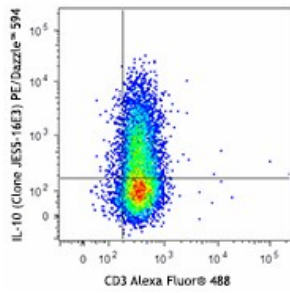
## Other Formats

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APC anti-mouse IL-10, Biotin anti-mouse IL-10, FITC anti-mouse IL-10, PE anti-mouse IL-10, Purified anti-mouse IL-10, Alexa Fluor® 647 anti-mouse IL-10, PE/Cyanine7 anti-mouse IL-10, Alexa Fluor® 488 anti-mouse IL-10, Brilliant Violet 421™ anti-mouse IL-10, Pacific Blue™ anti-mouse IL-10, PerCP/Cyanine5.5 anti-mouse IL-10, Purified anti-mouse IL-10 (Maxpar® Ready), Brilliant Violet 605™ anti-mouse IL-10, PE/Dazzle™ 594 anti-mouse IL-10, APC/Cyanine7 anti-mouse IL-10, Ultra-LEAF™ Purified anti-mouse IL-10

## Product Data

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PMA+ionomycin-stimulated (six hours in the presence of monensin) Th2-polarized BALB/c splenocytes were stained with CD3 Alexa Fluor® 488, fixed, permeabilized, and then stained with IL-10 (clone JES5-16E3) PE/Dazzle™ 594 (top) or rat IgG2b, κ PE/Dazzle™ 594 isotype control (bottom).

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