

PE/Cyanine7 anti-human IL-10 Antibody

Catalog# / Size	501419 / 25 tests 501420 / 100 tests
Clone	JES3-9D7
Regulatory Status	RUO
Other Names	Interleukin-10, B cell derived T cell growth factor (B-TCGF), Cytokine synthesis inhibitory factor (CSIF), T-cell growth inhibitory factor (TGIF)
Isotype	Rat IgG1, κ
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.

Product Details

Verified Reactivity	Human
Reported Reactivity	Baboon, Rhesus, Cynomolgus
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	COS - expressed, recombinant human IL-10
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE/Cyanine7 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	<p>ELISA Capture¹⁻⁵ or ELISPOT Capture⁶: The Ultra-LEAF 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 Ultra-LEAF™ purified antibody is suggested for ELISPOT capture.</p> <p>Neutralization^{1-3,9}: The Ultra-LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for neutralization of human IL-10 bioactivity (Cat. Nos. 501427 & 501428). The JES3-9D7 antibody can neutralize the bioactivity of natural or recombinant IL-10.</p> <p>Additional reported applications (for the relevant formats) include: immunohistochemical staining¹².</p> <p>Note: For testing human IL-10 in serum or plasma, BioLegend's ELISA Max™ Sets (Cat. Nos. 430601 & 430606) are specially developed and recommended.</p> <p>The JES3-9D7 antibody reacts with human and viral interleukin-10 (IL-10).</p>

Additional Product Notes

BioLegend is in the process of converting the name PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact [Technical Service](#) if you have any questions.

Application References

(PubMed link indicates BioLegend citation)

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)
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10. Strydom 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)

Product Citations

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11. Tai YT, *et al.* 2019. *Leukemia.* 33:426. [PubMed](#)
12. Anang DC, *et al.* 2022. *Cells.* 11: [PubMed](#)
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15. Levin MJ, *et al.* 2018. *J Clin Invest.* 128:4429. [PubMed](#)
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17. Lu H, *et al.* 2020. *Am J Reprod Immunol.* 83: [PubMed](#)
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RRID

AB_2280292 (BioLegend Cat. No. 501419)
 AB_2125385 (BioLegend Cat. No. 501420)

Antigen Details

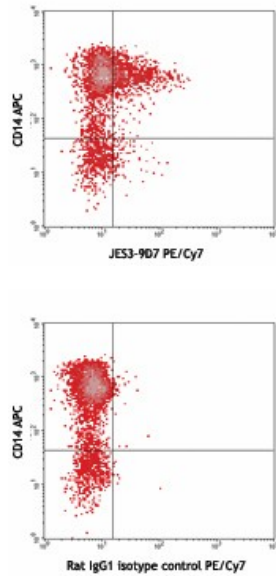
Structure	Acid-labile cytokine, dimer, 35-40 kD (Mammalian)
Bioactivity	Inhibit IFN- γ , TNF- β , IL-2 production by T H 1 clones; inhibits macrophage-mediated IL-1, IL-6, TNF- α synthesis; suppress delayed type hypersensitivity response; stimulate T H 2 cell response; mast cell proliferation in
Cell Sources	Activated CD8 ⁺ and CD4 ⁺ T cells, activated monocytes, mast cells, Ly-1 B (mouse)
Cell Targets	T cells, B cells, mast cells, macrophages
Receptors	IL-10R (CDw210)
Cell Type	Tregs
Biology Area	Cell Biology, Immunology, Neuroinflammation, Neuroscience
Molecular Family	Cytokines/Chemokines
Antigen References	<ol style="list-style-type: none"> 1. Fitzgerald K, <i>et al.</i> Eds. 2001. <i>The Cytokine FactsBook.</i> Academic Press San Diego. 2. de Waal-Malefyt R, <i>et al.</i> 1992. <i>Curr. Opin. Immunol.</i> 4:314. 3. Howard M, <i>et al.</i> 1992. <i>Immunol. Today.</i> 13:198. 4. Quesniaux V. 1992. <i>Research Immunol.</i> 143:385.
Regulation	Production inhibited by IL-4, IL-10
Gene ID	3586

Related Protocols

Other Formats

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

Product Data



LPS-stimulated (overnight) human peripheral blood mononuclear cells surface stained with CD14 APC and intracellularly stained with JES3-9D7 PE/Cyanine7 (top data) or rat IgG1 isotype control PE/Cyanine7 (bottom data) (gated on monocyte population)

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