

Alexa Fluor® 647 anti-human IL-10 Antibody

Catalog# / Size	501414 / 25 tests 501412 / 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 Alexa Fluor® 647 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 10 ⁶ cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
Application Notes	ELISA Capture¹⁻⁵ or ELISPOT Capture⁶: The Ultra-LEAFpurified 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. 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. Additional reported applications (for the relevant formats) include: immunohistochemical

staining¹².

Note: For testing human IL-10 in serum or plasma, BioLegend's ELISA Max™ Sets (Cat. Nos. 430601 & 430606) are specially developed and recommended.

The JES3-9D7 antibody reacts with human and viral interleukin-10 (IL-10).

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)
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. Schaerli 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)

Product Citations

1. Vacaflares A, *et al.* 2016. *PLoS One.* 11: 0157175. [PubMed](#)
2. Golebski K, *et al.* 2021. *Immunity.* 54(2):291-307.e7. [PubMed](#)

RRID

AB_493319 (BioLegend Cat. No. 501414)
AB_493318 (BioLegend Cat. No. 501412)

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

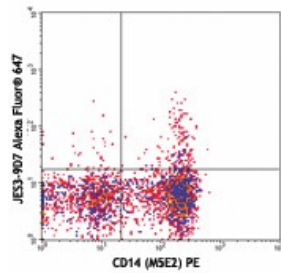
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

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 monocytes surface stained with with CD14 (M5E2) PE and intracellularly stained with JES3-9D7 Alexa Fluor® 647

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

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587