SONY

Product Data Sheet

Alexa Fluor® 488 anti-mouse IL-10

Catalog # / Size: 3125065 / 100 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 Alexa Fluor® 488 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5

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 ≤ 0.25 microg per 10^6 cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

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.

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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.