

# Product Data Sheet

## LEAF™ Purified anti-mouse IL-10

**Catalog # / Size:** 505011 / 50 µg  
505012 / 500 µg

**Clone:** JES5-16E3

**Isotype:** Rat IgG2b, κ

**Immunogen:** *E. coli*-expressed, recombinant mouse IL-10

**Reactivity:** Mouse

**Preparation:** The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

**Formulation:** 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

**Concentration:** 1.0 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C. This LEAF™ solution contains no preservative; handle under aseptic conditions.

## Applications:

**Applications:** ELISA Capture, ELISPOT Capture - *Quality tested*  
Neut, ICFC, IHC - *Reported in the literature*  
CyTOF® - *Validated*

**Recommended Usage:** Each lot of this antibody is quality control tested by ELISA assay. For ELISA and ELISPOT capture applications, a concentration range of 4-8 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of IL-10 recombinant protein ranging from 2000 to 15 pg/ml are recommended for each ELISA plate. It is recommended that the reagent be titrated for optimal performance for each application.

**\* For ELISA/ELISPOT capture, it is very critical to use 0.2 M Sodium Phosphate Buffer, pH 6.5 (11.8g Na<sub>2</sub>HPO<sub>4</sub>, 16.1g NaH<sub>2</sub>PO<sub>4</sub>; q.s. to 1.0 L) as coating buffer.**

**Note:** Carbonate buffer, pH 9.5 should not be used as coating buffer for JES5-2A5. It may cause high background and lower sensitivity.

**Application Notes:** **ELISA or ELISPOT Detection<sup>1,9,11</sup>:** 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<sup>14</sup>:** The LEAF™ Purified JES5-16E3 antibody can neutralize the bioactivity of natural or recombinant IL-10.

- 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 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.
  9. Brummel R and Lenert P. 2005. *J. Immunol.* 174:2429.
  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 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.

- 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.
  4. Quesniaux V. 1992. *Res. Immunol.* 143:385.
  5. Norton SK, *et al.* 2008. *J. Immunol.* 180:2848.

### Related Products: Product

### Clone

### Application



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LEAF™ Purified Rat IgG2a, κ Isotype Ctrl

RTK2758

FC, ICFC, WB, IP, ICC, IF,  
IHC, FA



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