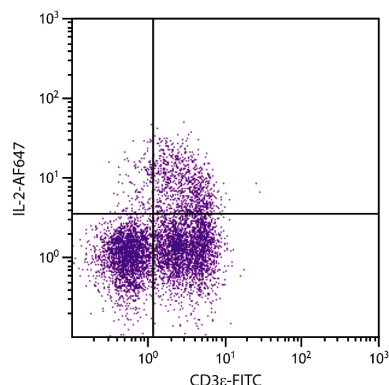




Rat Anti-Mouse IL-2

Cat. No.	Format	Size
10202-01	Purified (UNLB)	0.5 mg
10202-02	Fluorescein (FITC)	0.1 mg
10202-08	Biotin (BIOT)	0.5 mg
10202-09	R-phycoerythrin (PE)	0.1 mg
10202-30	Alexa Fluor® 488 (AF488)	0.1 mg
10202-31	Alexa Fluor® 647 (AF647)	0.1 mg



PMA and ionomycin stimulated BALB/c mouse splenocytes were stained with Rat Anti-Mouse CD3ε-FITC (SB Cat. No. 1535-02) followed by intracellular staining with Rat Anti-Mouse IL-2-AF647 (SB Cat. No. 10202-31).

Overview

Clone	JES6-5H4
Isotype	Rat IgG _{2b} K
Immunogen	<i>E. coli</i> -expressed mouse IL-2
Specificity	Mouse IL-2
Alternate Name(s)	Interleukin-2, thymocyte differentiation factor, TDF, T cell growth factor, TCGF, killer cell helper factor, KHF, macrophage-activating factor for cytotoxicity I, MAF-C I, eosinophil differentiation factor, EDF

Applications

ELISA-Detection – Quality tested ^{1-5,7}
 ELISA-Capture – Quality tested
 FC – Quality tested ^{8,14-17}
 ELISPOT-Detection – Reported in literature ^{5,6,8-13}
 IHC-FS – Reported in literature ¹⁸⁻²⁰
 IP – Reported in literature ^{1,2}
 Neut – Reported in literature ^{1,2}
 Multiplex-Detection – Reported in literature ³

Working Dilutions

ELISA	Purified (UNLB) antibody	≤ 5 µg/mL
	BIOT conjugate	1:1,000 – 1:2,000
Flow Cytometry	FITC and PE conjugates	≤ 1 µg/10 ⁶ cells
	AF488 and AF647 conjugates	≤ 0.3 µg/10 ⁶ cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL	
Other Applications	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.	

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg labeled antibody in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Alexa Fluor[®] 488 (AF488) and Alexa Fluor 647[®] (AF647) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN₃. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

1. Sander B, Höiden I, Andersson U, Möller E, Abrams JS. Similar frequencies and kinetics of cytokine producing cells in murine peripheral blood and spleen. Cytokine detection by immunoassay and intracellular immunostaining. *J Immunol Methods*. 1993;166:201-14. (Immunogen, ELISA-Detection, IP, Neut)
2. Abrams JS, Roncarolo M, Yssel H, Andersson U, Gleich GJ, Silver JE. Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. *Immunol Rev*. 1992;127:5-24. (ELISA-Detection, IP, Neut)
3. Carson RT, Vignali DA. Simultaneous quantitation of 15 cytokines using a multiplexed flow cytometric assay. *J Immunol Methods*. 1999;227:41-52. (ELISA-Detection, Multiplex-Detection)
4. Abrams JS. Immunoenzymetric assay of mouse and human cytokines using NIP-labeled anti-cytokine antibodies. *Curr Protoc Immunol*. 2001;6.20:1-15. (ELISA-Detection)
5. Pack CD, Cestra AE, Min B, Legge KL, Li L, Caprio-Young JC, et al. Neonatal exposure to antigen primes the immune system to develop responses in various lymphoid organs and promotes bystander regulation of diverse T cell specificities. *J Immunol*. 2001;167:4187-95. (ELISA-Detection, ELISPOT-Detection)
6. Linker RA, Rott E, Hofstetter HH, Hanke T, Toyka KV, Gold R. EAE in beta-2 microglobulin-deficient mice: axonal damage is not dependent on MHC-I restricted immune responses. *Neurobiol Dis*. 2005;19:218-28. (ELISPOT-Detection)
7. Gessner A, Mohrs K, Mohrs M. Mast cells, basophils, and eosinophils acquire constitutive IL-4 and IL-13 transcripts during lineage differentiation that are sufficient for rapid cytokine production. *J Immunol*. 2005;174:1063-72. (ELISA-Detection)
8. Karulin AY, Hesse MD, Tary-Lehmann M, Lehmann PV. Single-cytokine-producing CD4 memory cells predominate in type 1 and type 2 immunity. *J Immunol*. 2000;164:1862-72. (ELISPOT-Detection, FC)
9. Stern BV, Boehm BO, Tary-Lehmann M. Vaccination with tumor peptide in CpG adjuvant protects via IFN- γ -dependent CD4 cell immunity. *J Immunol*. 2002;168:6099-105. (ELISPOT-Detection)
10. Fedoseyeva EV, Kishimoto K, Rolls HK, Illigens BM, Dong VM, Valujskikh A, et al. Modulation of tissue-specific immune response to cardiac myosin can prolong survival of allogeneic heart transplants. *J Immunol*. 2002;169:1168-74. (ELISPOT-Detection)
11. Nekrasova T, Shive C, Gao Y, Kawamura K, Guardia R, Landreth G, et al. ERK1-deficient mice show normal T cell effector function and are highly susceptible to experimental autoimmune encephalomyelitis. *J Immunol*. 2005;175:2374-80. (ELISPOT-Detection)
12. Hofstetter HH, Mössner R, Lesch KP, Linker RA, Toyka KV, Gold R. Absence of reuptake of serotonin influences susceptibility to clinical autoimmune disease and neuroantigen-specific interferon-gamma production in mouse EAE. *Clin Exp Immunol*. 2005;142:39-44. (ELISPOT-Detection)
13. Klinman D. ELISPOT assay to detect cytokine-secreting murine and human cells. *Curr Protoc Immunol*. 2008;6.19:1-9. (ELISPOT-Detection)
14. Groux H, O'Garra A, Bigler M, Rouleau M, Antonenko S, de Vries JE, et al. A CD4⁺ T-cell subset inhibits antigen-specific T-cell responses and prevents colitis. *Nature*. 1997;389:737-42. (FC)
15. Tripp RA, Moore D, Jones L, Sullender W, Winter J, Anderson LJ. Respiratory syncytial virus G and/or SH protein alters Th1 cytokines, natural killer cells, and neutrophils responding to pulmonary infection in BALB/c mice. *J Virol*. 1999;73:7099-107. (FC)
16. Hamada H, Garcia-Hernandez Mde L, Reome JB, Misra SK, Strutt TM, McKinstry KK, et al. Tc17, a unique subset of CD8 T cells that can protect against lethal influenza challenge. *J Immunol*. 2009;182:3469-81. (FC)
17. Nakamura T, Nakao T, Yoshimura N, Ashihara E. Rapamycin prolongs cardiac allograft survival in a mouse model by inducing myeloid-derived suppressor cells. *Am J Transplant*. 2015 May 5. doi: 10.1111/ajt.13276. [Epub ahead of print]. (FC)
18. Hersmann GH, Kriegsmann J, Simon J, Hüttich C, Bräuer R. Expression of cell adhesion molecules and cytokines in murine antigen-induced arthritis. *Cell Adhes Commun*. 1998;6:69-82. (IHC-FS)
19. Yamagami S, Tsuru T. Increase in orthotopic murine corneal transplantation rejection rate with anterior synechiae. *Invest Ophthalmol Vis Sci*. 1999;40:2422-6. (IHC-FS)
20. Cardona AE, Restrepo BI, Jaramillo JM, Teale JM. Development of an animal model for neurocysticercosis: immune response in the central nervous system is characterized by a predominance of $\gamma\delta$ T cells. *J Immunol*. 1999;162:995-1002. (IHC-FS)

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