TECHNICAL DATA SHEET

APC Anti-Mouse IL-2 (JES6-5H4)

Catalog Number: 20-7021

PRODUCT INFORMATION

Contents: APC Anti-Mouse IL-2 (JES6-5H4)

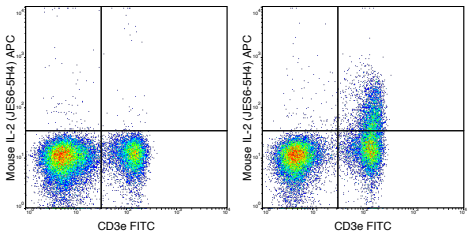
Isotype: Rat IgG2b, kappa

Concentration: 0.2 mg/mL

Clone: JES6-5H4

Reactivity: Mouse

Formulation: 10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stimulated with PMA and Ionomycin (right panel) or unstimulated (left panel) and then stained with FITC Anti-Mouse CD3e (35-0031), followed by intracellular staining with 0.06 ug APC Anti-Mouse IL-2 (20-7021).

DESCRIPTION

The JES6-5H4 antibody binds to mouse Interleukin-2 (IL-2), a 17 kDa cytokine that is secreted by activated T cells. This cytokine acts as an autocrine stimulatory factor for T cell proliferation, differentiation and survival, as well as being an effective activator of B cells and inducer of NK cell cytotoxic functions. IL-2 plays a key modulatory role in the differentiation of T cells toward either Th17 or T regulatory (Treg) cell types and is important for Treg cell function. The IL-2 receptor (IL-2R) is a complex consisting of an IL-2R alpha chain (CD25), along with the IL-2R beta chain (CD122) and the common gamma chain (CD132). IL-2 may also bind with low affinity to the T cell surface protein CD25 alone, although this interaction does not induce cell signaling.The JES6-5H4 antibody is extensively used for intracellular detection of IL-2 by flow cytometry, for detection of soluble cytokine in ELISA, and as a neutralizing reagent in vitro and in vivo.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

REFERENCES

Attridge K, Wang CJ, Wardzinski L, Kenefeck R, Chamberlain JL, Manzotti C, Kopf M, and Walker LSK. 2012. Blood. 119: 4656-4664. (flow cytometry)Helbig C, Gentek R, Backer RA, de Souza Y, Derks IAM, Eldering E, Wagner K, Jankovic D, Gridley T, Moerland PD, Flavell RA, and Amsen D. 2012. Proc. Natl. Acad. Sci. 109: 9041-9046. (ELISA – detection)Chen Q, Kiim YC, Laurence A, Punkosdy GA, and Shevach EM. 2011. J. Immunol. 186: 6329-6337. (in vivo blocking)Weber KS, Hildner K, Murphy KM and Allen PM. 2010 J. Immunol. 185: 2836-2846. (ELISA)Wang C, Morley SC, Donermeyer D, Peng I, Lee WP, Devoss J, Damilenko DM, Lin Z, Zhang J, Zhou J, Allen PM, and Brown EJ. 2010. J. Immunol. 185: 7487-7497. (immunocytochemistry/immunofluorescence microscopy)Cardona AE and Teale JM. 2002. J. Immunol. 169: 3163-3171. (immunohistochemistry – frozen tissue)Woo AL, Gildea LA, Tack LM, Miller ML, Spicer A, Millhorn DE, Finkelman FD, Dassett DJ, and Shull GE. 2002. J. Biol. Chem. 277: 49036-49046. (in vivo blocking)