

Anti-Human IL-2 Antibody, Clone MT8G10, FITC

Mouse monoclonal antibody against human, cynomolgus IL-2, FITC-conjugated

Catalog #100-1464 100 Tests 5 μ L/test

Product Description

This mouse monoclonal antibody (clone MT8G10) reacts with human interleukin 2 (IL-2). IL-2 is an ~16 kDa cytokine composed of a four-alphahelix bundle produced primarily by CD4+ T helper (Th) cells and to a lesser degree by CD8+ T cells, natural killer (NK) cells, and NK T cells. It binds to the IL-2 receptor α (IL-2R α ; CD25), which complexes with IL-2R β (CD122) and γ c (CD132) subunits and leads to the activation of JAK1/3, PI3K-AKT, and MAPK signaling pathways. IL-2 mediates T cell growth and proliferation, facilitates the differentiation of CD4+ T cells to Th1 and Th2 cells, promotes CD8+ T cell and NK cell cytolytic activity, and drives the development of CD4+FOXP3+ regulatory T cells. The MT8G10 antibody is suitable for the detection of intracellular IL-2 by flow cytometry.

Target Antigen: IL-2

Alternative Names: IL2, interleukin 2, interleukin-2, lymphokine, T cell growth factor, TCGF

Gene ID: 3558

Species Reactivity: Human, Cynomolgus

Host Species: Mouse

Clonality: Monoclonal

Clone: MT8G10

Isotype: IgG1

Immunogen: Recombinant human IL-2

Conjugate: FITC (Fluorescein isothiocyanate)

Applications

Verified Applications: FC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Purification: The antibody was purified by affinity chromatography and conjugated with FITC.

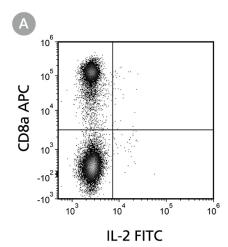
Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged

exposure to light. Stable until expiry date (EXP) on label.

Directions for Use: For flow cytometry, the suggested use of this antibody is $5 \mu L$ per 1×10^6 cells in $50 \mu L$. It is

recommended that the antibody be titrated for optimal performance for each application.

Data



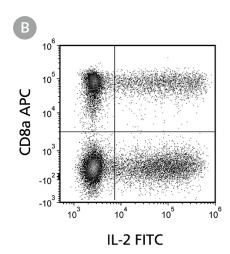


Figure 1. Flow Cytometry Analysis of Unstimulated and Stimulated Human T Cells Labeled With Anti-Human IL-2 Antibody, Clone MT8G10 FITC

(A) Flow cytometry analysis of unstimulated human T cells labeled with anti-human IL-2 Antibody, Clone MT8G10, FITC and anti-human CD8a antibody, clone RPA-T8, APC (Catalog #60022AZ.1). (B) Flow cytometry analysis of PMA/ionomycin-stimulated human T cells labeled with anti-human IL-2 Antibody, Clone MT8G10, FITC and anti-human CD8a antibody, clone RPA-T8, APC (Catalog #60022AZ.1).

Related Products

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies, or contact us at techsupport@stemcell.com.

References

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Boyman O & Sprent J. (2012) The role of interleukin-2 during homeostasis and activation of the immune system. Nat Rev Immunol 12(3): 180-90.

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