SANTA CRUZ BIOTECHNOLOGY, INC.

IL-2 (G-6): sc-393947

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Lymphokines are a group of signaling molecules involved in communication between cells of the immune system. Lymphokines secreted by activated lymphocytes include proteins such as IL-2. This protein is secreted primarily by helper T cells that have been activated through the T cell receptor complex or by other mitogens. Cells targeted by IL-2 include activated T helper and cytotoxic T cells, inducing their proliferation. The secretion of IL-2 can also act as a growth factor for B cells. To date, three different IL-2-dependent signal transduction pathways have been identified: the c-Fos/c-Jun induction pathway mediated by Src family protein-tyrosine kinases; the c-Myc induction pathway; and the Rapamycin-sensitive pathway; all of which result in the induction of Bcl-2. In addition, the transcription factor NFAT has been shown to play a major role in the regulation of IL-2 transcription and correlates to an age-related decline in the expression of IL-2.

REFERENCES

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4. Guy, G.R., Bee, N.S. and Peng, C.S. 1990. Lymphokine signal transduction. Prog. Growth Factor Res. 2: 45-70.
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CHROMOSOMAL LOCATION

Genetic locus: IL2 (human) mapping to 4q27.

SOURCE

IL-2 (G-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 89-118 within an internal region of IL-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

IL-2 (G-6) is recommended for detection of IL-2 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

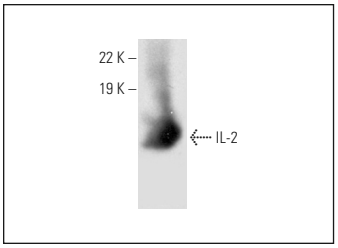
Suitable for use as control antibody for IL-2 siRNA (h): sc-39619, IL-2 shRNA Plasmid (h): sc-39619-SH and IL-2 shRNA (h) Lentiviral Particles: sc-39619-V.

Molecular Weight of IL-2: 15 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



IL-2 (G-6): sc-393947. Western blot analysis of human recombinant IL-2.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.