

IL-2 (N-13): sc-48545

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 interleukin-2 (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. IL-2 targets 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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2. Taniguchi, T., et al. 1983. Structure and expression of a cloned cDNA for human interleukin-2. *Nature* 302: 305-310.
3. Lowenthal, J.W., et al. 1985. Similarities between interleukin-2 receptor number and affinity on activated B and T lymphocytes. *Nature* 315: 669-672.
4. Guy, G.R., et al. 1990. Lymphokine signal transduction. *Prog. Growth Factor Res.* 2: 45-70.
5. Germann, T., et al. 1991. Components of an antigen-/T cell receptor-independent pathway of lymphokine production. *Eur. J. Immunol.* 21: 1857-1861.
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7. Eljaafari, A., et al. 1995. Contribution of p56Lck to the upregulation of cytokine production and T cell proliferation by IL-2 in human CD3-stimulated T cell clones. *Cell. Immunol.* 160: 152-156.
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CHROMOSOMAL LOCATION

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

SOURCE

IL-2 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of IL-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48545 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-2 (N-13) is recommended for detection of IL-2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

Positive Controls: Jurkat whole cell lysate: sc-2204, CCRF-CEM cell lysate: sc-2225 or HuT 78 whole cell lysate: sc-2208.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **IL-2 (F-5): sc-133118** or **IL-2 (C2-1-hIL2): sc-32295**, our highly recommended monoclonal alternatives to IL-2 (N-13).