

IL-4 (C-19): sc-1260

BACKGROUND

Interleukin-4 (IL-4), also designated B cell stimulatory factor-1, is a glycosylated cytokine secreted by activated T lymphocytes, basophils and mast cells. The secreted IL-4 protein promotes the growth and differentiation of cells that participate in immune defense by favoring such events as the expansion of the Th2 lineage relative to Th1 cells. These T helper cell subsets are defined by their pattern of cytokine secretion: Th1 cells secrete IL-2, TNF β and IFN- γ , while Th2 cells secrete IL-4, IL-5 and IL-10. Another key immunological function of IL-4 is to induce immunoglobulin class switching. IL-4 has been shown to induce the production of IgE and enhance IgG₄ secretion by B cells, but suppress the production of IgM, IgA, IgG₁, IgG₂ and IgG₃. It has been determined that Stat6 is rapidly tyrosine phosphorylated following stimulation with IL-3 or IL-4, but is not detectably phosphorylated following stimulation with IL-2, IL-12 or erythropoietin.

CHROMOSOMAL LOCATION

Genetic locus: Il4 (mouse) mapping to 11 B1.3.

SOURCE

IL-4 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of IL-4 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-1260 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-4 (C-19) is recommended for detection of IL-4 of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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-4 siRNA (m): sc-39624, IL-4 shRNA Plasmid (m): sc-39624-SH and IL-4 shRNA (m) Lentiviral Particles: sc-39624-V.

Molecular Weight of IL-4: 18 kDa.

STORAGE

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

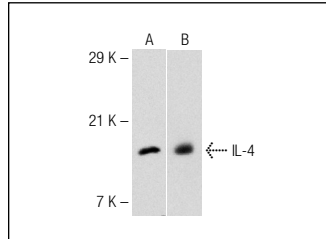
PROTOCOLS

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

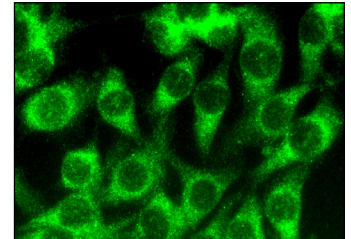
RESEARCH USE

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

DATA



Western blot analysis of mouse recombinant IL-4 (A,B). Antibodies tested include IL-4 (C-19): sc-1260 (A) and IL-4 (M-19): sc-1261 (B).



IL-4 (C-19): sc-1260. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

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