

IL-12B p40 (1-1A4): sc-53348

BACKGROUND

Interleukin-12, or IL-12, also known as natural killer cell stimulatory factor (NKSF) and cytotoxic lymphocyte maturation factor (CLMF), is a pleiotropic cytokine that has multiple effects on both natural killer (NK) cells and T lymphocytes. IL-12 is a heterodimer composed of subunits IL-12A p35 and IL-12B p40. It is secreted by a wide variety of antigen presenting cells (APCs), including phagocytes, B cells and Langerhans cells. IL-12 is integrally involved in mediating many aspects of antiviral immunity. In addition to stimulating T helper cell development, IL-12 is a potent inducer of interferon- γ (IFN- γ) production by T cells and NK cells. An increase of IL-12 production has been shown to be a consequence of infection with EBV, CMV, LCMV and HSV. It is not clear what separate effects can be attributed to each IL-12 subunit; however, there is evidence that IL-12A p35 is the biologically active component and may be responsible for signal transduction via the IL-12 receptor.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: IL12B (human) mapping to 5q33.3.

SOURCE

IL-12B p40 (1-1A4) is a mouse monoclonal antibody raised against recombinant IL-12 of human origin.

PRODUCT

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

APPLICATIONS

IL-12B p40 (1-1A4) is recommended for detection of IL-12B p40 of human 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

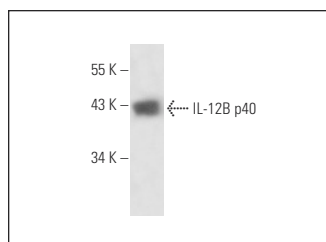
Suitable for use as control antibody for IL-12B p40 siRNA (h): sc-39640, IL-12B p40 shRNA Plasmid (h): sc-39640-SH and IL-12B p40 shRNA (h) Lentiviral Particles: sc-39640-V.

Molecular Weight of IL-12B p40: 40 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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).

DATA



IL-12B p40 (1-1A4): sc-53348. Western blot analysis of human recombinant IL-12B p40.

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.