IL-12 (JJ07): sc-74147

BACKGROUND

The interleukins (ILs) are a broad family of well characterized cytokines, primarily of hematopoietic cell origin. As new cytokines are molecularly characterized, they are assigned an IL number to maintain a standard nomenclature. ILs are secreted by immune cells (mainly macrophages, B cells or T cells) that regulate a wide range of immune system functions. The functions of different ILs vary from regulating inflammatory and immune responses, functioning as autocrine factor and regulating and/or inhibiting other ILs. IL-12 is secreted by macrophages and human B-lymphoblastoid cells in response to antigenic stimulation. It is responsible for the differentiation of naive CD4+ T cells into type 1 helper T cells that produce interferon-γ (IFN-γ). It also activates production of tumor necrosis factor α (TNFα) from T and natural killer (NK) cells, and it inhibits IL-4 mediated suppression of IFN-γ. IL-12 also has antiangiogenic activity, since the production of IFN-γ increases the production of inductive protein-10 (IP-10).

REFERENCES


RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: IL12A (human) mapping to 3q25.33, IL12B (human) mapping to 5q33.3.

SOURCE

IL-12 (JJ07) is a mouse monoclonal antibody raised against full length recombinant IL-12 of human origin.

PRODUCT

Each vial contains 100 µg IgG1 in 1.0 ml of PBS with <0.1% sodium azide and protein stabilizer.

APPLICATIONS

IL-12 (JJ07) is recommended for detection of IL-12 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000), non cross-reactive with IL-23 or IL-12 p40.

Molecular Weight of IL-12: 70 kDa.

SELECT PRODUCT CITATIONS


STORAGE

For immediate and continuous use, store at 4°C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

PROTOCOLS

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