**IL-12B p40 (C17.8): sc-57258**

**BACKGROUND**

The interleukins (ILs) are a broad family of well-characterized cytokines, primarily of hematopoietic cell origin. 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 an autocrine factor and regulating and/or inhibiting other ILs. IL-12 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. IL-12 is a heterodimer composed of subunits IL-12A p35 and IL-12B p40. The p40 subunit of IL-12 also combines with p19, a protein that shows no biological activity by itself, to form a biologically active, composite cytokine, IL-23. IL-23 shares some *in vivo* functions with IL-12, including activation of the transcription factor Stat4 and IFN-γ production and proliferation in PHA blast T cells, as well as in CD45RO (memory) T cells.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: Il12b (mouse) mapping to 11 B1.1.

**SOURCE**

IL-12B p40 (C17.8) is a rat monoclonal antibody raised against full length IL-12B p40 of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG₂₅ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for neutralization studies, sc-57258 L, 200 µg/0.1 ml.

**APPLICATIONS**

IL-12B p40 (C17.8) is recommended for detection of IL-12B p40 of mouse origin by Western Blotting (starting dilution 1:200, 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), 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); also recommended for detection of IL-12/IL-23 p40 subunit (monomer, homodimer and heterodimer IL-12 p35/p40 or IL-23 p19/p40).

Suitable for use as control antibody for IL-12B p40 siRNA (m): sc-39641, IL-12B p40 shRNA Plasmid (m): sc-39641-SH and IL-12B p40 shRNA (m) Lentiviral Particles: sc-39641-V.

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

**SELECT PRODUCT CITATIONS**


**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.