SANTA CRUZ BIOTECHNOLOGY, INC.

IL-6 (R-19): sc-1266

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Interleukin 6, or IL-6, is a multifunctional protein, 212 amino acids in length, that plays critical roles in host defense, immune response, and hematopoiesis. IL-6 is constitutively expressed by epidermal Langerhans cells and its expression is induced in stimulated keratinocytes. IL-6, along with IL-1β and TNFα, act as endogenous pyrogens, regulating the fever response to bacterial invasion. The IL-6 receptor is a trimeric complex composed of an IL-6-specific a chain and a homodimer of the gp130 glycoprotein common to the IL-6, IL-11, CNTF, OSM and LIF receptors. Stimulation with IL-6 leads to gp130 homodimerization and the activation of associated kinases JAK1 and JAK2. Once activated, JAK1 and JAK2 phosphorylate Stat3 causing its nuclear translocation and transcription of Stat3-responsive genes. IL-6 has also been shown to activate the Ras/MAP kinase pathway, which regulates NF-IL-6 transcription.

CHROMOSOMAL LOCATION

Genetic locus: Il6 (mouse) mapping to 5 B1.

SOURCE

IL-6 (R-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of IL-6 of rat 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-1266 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-6 (R-19) is recommended for detection of IL-6 of mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-6 siRNA (m): sc-39628, IL-6 siRNA (r): sc-156148, IL-6 shRNA Plasmid (m): sc-39628-SH, IL-6 shRNA Plasmid (r): sc-156148-SH, IL-6 shRNA (m) Lentiviral Particles: sc-39628-V and IL-6 shRNA (r) Lentiviral Particles: sc-156148-V.

Molecular Weight of IL-6: 21 kDa.

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.

SELECT PRODUCT CITATIONS

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MONOS Satisfaction Guaranteed

Try **IL-6 (10E5): sc-57315**, our highly recommended monoclonal alternative to IL-6 (R-19).