SANTA CRUZ BIOTECHNOLOGY, INC.

IL-10 (H-160): sc-7888



BACKGROUND

Interleukin 10, or IL-10, is a 178 amino acid protein that is primarily secreted by TH2 clones. IL-10 has dual functions, the first of which is the suppression of cytokine production by TH1 clones responding to antigen presented by monocyte and macrophage antigen presenting cells (APCs). The second function consists of the inhibition of response of cytokine targeted cells, possibly by the downregulation of CD25 (the interleukin-2 receptor) on macrophages and B lymphocytes. Human and murine IL-10 exhibit 81% sequence identity at the amino acid level, and share 73% identity at the cDNA level. Both human and murine IL-10 are acid-liable and exist as non-covalently-linked homodimers in solution. IL-10 exerts its biological activity through the IL-10 receptor (IL-10R); a glycoprotein whose expression can be induced in cultured macrophages and fibroblasts by lipopolysaccharide (LPS) stimulation. IL-10 expression has been shown to be elevated in HIV-1 infected individuals and has been implicated in the progression of the disease.

CHROMOSOMAL LOCATION

Genetic locus: IL10 (human) mapping to 1q32.1.

SOURCE

IL-10 (H-160) is a rabbit polyclonal antibody raised against amino acids 19-178 of IL-10 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

IL-10 (H-160) is recommended for detection of IL-10 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)], 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).

IL-10 (H-160) is also recommended for detection of IL-10 in additional species, including equine.

Suitable for use as control antibody for IL-10 siRNA (h): sc-39634, IL-10 shRNA Plasmid (h): sc-39634-SH and IL-10 shRNA (h) Lentiviral Particles: sc-39634-V.

Molecular Weight of IL-10 monomer: 20 kDa.

Molecular Weight of IL-10 dimer: 37 kDa.

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.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



IL-10 (H-160): sc-7888. Western blot analysis of human recombinant IL-10.

SELECT PRODUCT CITATIONS

- 1. Andersson, A., et al. 2005. Effects of prednisolone treatment on cytokine expression in patients with leprosy type 1 reactions. Infect. Immun. 73: 3725-3733.
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- Nakashima, S., et al. 2005. Antiproliferative effects of NKH477, a forskolin derivative, on cytokine profile in rat lung allografts. J. Heart Lung Transplant. 24: 462-469.
- Galkowska, H., et al. 2006. Chemokines, cytokines, and growth factors in keratinocytes and dermal endothelial cells in the margin of chronic diabetic foot ulcers. Wound Repair Regen. 14: 558-565.
- Liu, Y., et al. 2006. Inhibition of atherogenesis in LDLR knockout mice by systemic delivery of adeno-associated virus type 2-hlL-10. Atherosclerosis 188: 19-27.
- Bergmann, C., et al. 2008. T regulatory type 1 cells in squamous cell carcinoma of the head and neck: mechanisms of suppression and expansion in advanced disease. Clin. Cancer Res. 14: 3706-3715.
- Athale, J., et al. 2012. Nrf2 promotes alveolar mitochondrial biogenesis and resolution of lung injury in *Staphylococcus aureus* pneumonia in mice. Free Radic. Biol. Med. 53: 1584-1594.

MONOS Satisfation Guaranteed

Try IL-10 (E-10): sc-8438 or IL-10 (A00045.01):

sc-81028, our highly recommended monoclonal aternatives to IL-10 (H-160). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **IL-10 (E-10): sc-8438**.