# SANTA CRUZ BIOTECHNOLOGY, INC.

# IL-1β (h): 293 Lysate: sc-111184



#### BACKGROUND

Two forms of interleukin-1, designated IL-1 $\alpha$  and IL-1 $\beta$ , have been described. Although encoded by distinct genes and exhibiting roughly only 25% sequence identity, IL-1 $\alpha$  and IL-1 $\beta$  bind to the same receptor and seem to elicit similar biological responses. IL-1 production is generally thought to be associated with inflammation, but it has also been shown to be expressed during kidney development, thymocyte differentiation and cartilage degradation. IL-1 plays a critical role in the regulation of immune response and inflammation, acting as an activator of T and B lymphocytes and natural killer (NK) cells. In T cells, IL-1 stimulates the production of IL-2 and selectively inhibits IL-4 expression. IL-1 induces B cell proliferation and maturation, and immunoglobulin synthesis. NK cells require IL-1 $\beta$  for production of the anti-pathogen IFN-y. IL-1 has also been implicated in several pathological conditions including rheumatoid arthritis, inflammatory bowel disease and atherosclerosis.

# REFERENCES

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# **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

# **PROTOCOLS**

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

#### **CHROMOSOMAL LOCATION**

Genetic locus: IL1B (human) mapping to 2q14.1.

### **PRODUCT**

IL-1<sub>β</sub> (h): 293 Lysate represents a lysate of human IL-1<sub>β</sub> transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

#### **APPLICATIONS**

IL-1 $\beta$  (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive IL-1ß antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

IL-1<sub>β</sub> (AS57): sc-52771 is recommended as a positive control antibody for Western Blot analysis of enhanced human IL-1ß expression in IL-1ß transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

# DATA





IL-16 (AS57): sc-52771. Western blot analysis of IL-16 expression in non-transfected: sc-110760 (A) and human IL-1ß transfected: sc-111184 (B) 293 whole cell lysates.

IL-1 $\beta$  (11E5): sc-52012. Western blot analysis of IL-1 $\beta$ expression in non-transfected: sc-110760 (A) and human IL-1β transfected: sc-111184 (B) 293 whole cell lysates.

#### **RESEARCH USE**

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