

# IL-1 $\beta$ (h): 293T Lysate: sc-176712

## 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- $\gamma$ . IL-1 has also been implicated in several pathological conditions including rheumatoid arthritis, inflammatory bowel disease and atherosclerosis.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: IL1B (human) mapping to 2q13.

## PRODUCT

IL-1 $\beta$  (h): 293T Lysate represents a lysate of human IL-1 $\beta$  transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

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

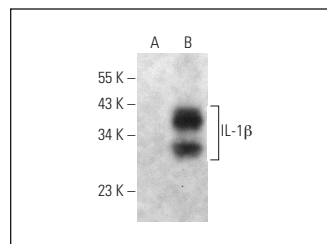
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

IL-1 $\beta$  (E-12): sc-515787 is recommended as a positive control antibody for Western Blot analysis of enhanced human IL-1 $\beta$  expression in IL-1 $\beta$  transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

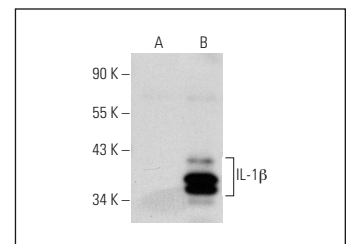
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



IL-1 $\beta$  (E-12): sc-515787. Western blot analysis of IL-1 $\beta$  expression in non-transfected: sc-117752 (A) and human IL-1 $\beta$  transfected: sc-176712 (B) 293T whole cell lysates.



IL-1 $\beta$  (E7-2-hIL $\beta$ ): sc-32294. Western blot analysis of IL-1 $\beta$  expression in non-transfected: sc-117752 (A) and human IL-1 $\beta$  transfected: sc-176712 (B) 293T whole cell lysates.

## 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.