SANTA CRUZ BIOTECHNOLOGY, INC.

IL-1β (h2): 293T Lysate: sc-159166

BACKGROUND

Two forms of interleukin-1, designated IL-1α and IL-1β, have been described. Although encoded by distinct genes and exhibiting roughly only 25% sequence identity, IL-1α and IL-1β 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-1β for production of the anti-pathogen IFN-γ. IL-1 has also been implicated in several pathological conditions including rheumatoid arthritis, inflammatory bowel disease and atherosclerosis.

REFERENCES

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6. Zúñiga-Pflücker, J.C., Di, J. and Lenardo, M.J. 1995. Requirement for TNFα and IL-1α in fetal thymocyte commitment and differentiation. Science 268: 1906-1909.
7. Sandborg, C.I., Imfeld, K.L., Zaldivar, F., Wang, Z., Buckingham, B.A. and Berman, M.A. 1995. IL-4 expression in human T cells is selectively inhibited by IL-1α and IL-1β. J. Immunol. 155: 5206-5212.

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 2q13.

PRODUCT

IL-1β (h2): 293T Lysate represents a lysate of human IL-1β transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

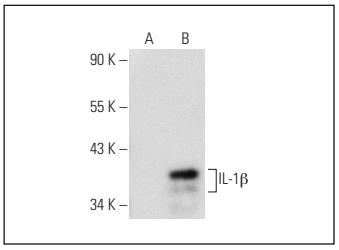
APPLICATIONS

IL-1β (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive IL-1β antibodies. Recommended use: 10-20 µl per lane.

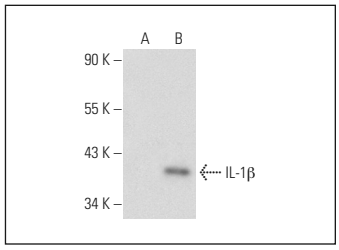
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

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

DATA



IL-1β (AS57): sc-52771. Western blot analysis of IL-1β expression in non-transfected: sc-117752 (**A**) and human IL-1β transfected: sc-159166 (**B**) 293T whole cell lysates.



IL-1β (11E5): sc-52012. Western blot analysis of IL-1β expression in non-transfected: sc-117752 (**A**) and human IL-1β transfected: sc-159166 (**B**) 293T whole cell lysates.

RESEARCH USE

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