IL-1β (11E5): sc-52012

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.

SOURCE
IL-1β (11E5) is a mouse monoclonal antibody raised against recombinant IL-1β of human origin.

PRODUCT
Each vial contains 100 µg IgG2b in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
IL-1β (11E5) is recommended for detection of IL-1β of mouse, rat and human 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for IL-1β siRNA (h): sc-39615, IL-1β siRNA (m): sc-39616, IL-1β shRNA Plasmid (h): sc-39615-SH, IL-1β shRNA Plasmid (m): sc-39616-SH, IL-1β shRNA (h) Lentiviral Particles: sc-39615-V and IL-1β shRNA (m) Lentiviral Particles: sc-39616-V.

Molecular Weight of IL-1β precursor: 31 kDa.
Molecular Weight of mature IL-1β: 17 kDa.
Positive Controls: IL-1β (h): 293 Lysate: sc-111184, SK-N-SH cell lysate: sc-2410 or BJAB whole cell lysate: sc-2207.

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

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

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

DATA

SELECT PRODUCT CITATIONS

See IL-1β (E7-2-hILβ): sc-32294 for IL-1β antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.