

IL-1 α (R-20): sc-1254

BACKGROUND

Two forms of interleukin 1, designated IL-1 α and IL-1 β , have been described. Although encoded by distinct genes and exhibiting roughly only 25% sequence identity, IL-1 α and IL-1 β 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 β 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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CHROMOSOMAL LOCATION

Genetic locus: IL1a (mouse) mapping to 2 F1.

SOURCE

IL-1 α (R-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of IL-1 α of rat origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1254 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

RESEARCH USE

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

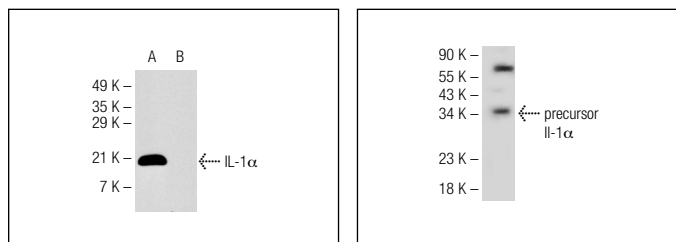
APPLICATIONS

IL-1 α (R-20) is recommended for detection of IL-1 α of mouse and rat 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).

Suitable for use as control antibody for IL-1 α siRNA (m): sc-39614, IL-1 α shRNA Plasmid (m): sc-39614-SH and IL-1 α shRNA (m) Lentiviral Particles: sc-39614-V.

Molecular Weight of IL-1 α : 33/17 kDa.

DATA



IL-1 α (R-20): sc-1254. Western blot analysis of human (A) and mouse (B) recombinant IL-1 α . IL-1 α (R-20): sc-1254. Western blot analysis of IL-1 α expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

1. Lossdörfer, S., et al. 2002. Localization of IL-1 α , IL-1 RI, TNF, TNF-RI and TNF-RII during physiological drift of rat molar teeth—an immunohistochemical and *in situ* hybridization study. *Cytokine* 20: 7-16.
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Try **IL-1 α (ALF-161): sc-12741**, our highly recommended monoclonal alternative to IL-1 α (R-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **IL-1 α (ALF-161): sc-12741**.