

IL-32 (Y-17): sc-50001

BACKGROUND

The interleukins make up a large family of well characterized cytokines, primarily of hematopoietic cell origin. The interleukins are secreted by immune cells (mainly macrophages, B cells and T cells) that regulate a wide range of immune system functions. Interleukin-32 (IL-32), also designated Natural Killer (NK) cell transcript 4 (nk4), may play a role in inflammatory responses such as lymphocyte activation. IL-32 is secreted following stimulation with inflammatory cytokines such as IL-1 β and IFN- γ , and by NK cells after exposure to IL-12 and IL-18. It also induces production of IL-1 β , TNF α , MIP-2 and IL-6. Expression of IL-32 increases after activation of T cells by mitogens or activation of NK cells by IL-2. The IL-32 protein contains three potential N-myristoylation sites, a tyrosine sulfation site, an RGD cell-attachment sequence and multiple putative phosphorylation sites. Human IL-32 exists as four isoforms.

REFERENCES

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3. Netea, M.G., Azam, T., Ferwerda, G., Girardin, S.E., Walsh, M., Park, J.S., Abraham, E., Kim, J.M., Yoon, D.Y., Dinarello, C.A. and Kim, S.H. 2005. IL-32 synergizes with nucleotide oligomerization domain (NOD) 1 and NOD2 ligands for IL-1 β and IL-6 production through a caspase-1-dependent mechanism. *Proc. Natl. Acad. Sci. USA* 102: 16309-11634.
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CHROMOSOMAL LOCATION

Genetic locus: IL32 (human) mapping to 16p13.3.

SOURCE

IL-32 (Y-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IL-32 of human 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-50001 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

IL-32 (Y-17) is recommended for detection of precursor and mature Interleukin-32 of human 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-32 siRNA (h): sc-60841, IL-32 shRNA Plasmid (h): sc-60841-SH and IL-32 shRNA (h) Lentiviral Particles: sc-60841-V.

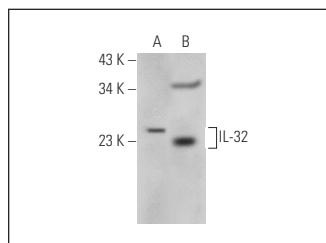
Molecular Weight of IL-32: 25 kDa.

Positive Controls: human stomach extract: sc-363780 or A549 cell lysate: sc-2413.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IL-32 (Y-17): sc-50001. Western blot analysis of IL-32 expression in human stomach tissue extract (A) and A549 whole cell lysate (B).

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 or our catalog for detailed protocols and support products.