SANTA CRUZ BIOTECHNOLOGY, INC.

NFKBIL1 (C-14): sc-109336

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The Power to Question

BACKGROUND

NFκB, a pleiotropic transcription factor, is present in almost all cell types and is involved in many biological processes including inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NFκB is a homo- or heterodimeric complex formed by the Rel-like domain-containing proteins RELA/p65, RELB, NFKB1/p105, NFKB1/p50, REL and NFKB2/p52. This complex is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors. The NFκB inhibitor-like protein 1 (NFKBIL1), also designated IKBL, acts as a negative regulator of NFκB activation. Mutations in the NFKBIL1 gene have been linked to several disorders including type 1 diabetes, rheumatoid arthritis, ulcerative colitis and chronic Chagas cardiomyopathy.

REFERENCES

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2. Deloukas, P. and van Loon, A.P. 1993. Genomic organization of the gene encoding the p65 subunit of NFκB: multiple variants of the p65 protein may be generated by alternative splicing. Hum. Mol. Genet. 2: 1895-1900.
3. Handel-Fernandez, M.E. and Vincek, V. 1999. Sequence analysis and expression of a mouse homolog of human IκBL gene. Biochim. Biophys. Acta 1444: 306-310.
4. de la Concha, E.G., et al. 2000. Susceptibility to severe ulcerative colitis is associated with polymorphism in the central MHC gene IKBL. Gastroenterology 119: 1491-1495.
5. Yamashita, T., et al. 2004. IKBL promoter polymorphism is strongly associated with resistance to type 1 diabetes in Japanese. Tissue Antigens 63: 223-230.
6. Shibata, H., et al. 2006. Direct determination of single nucleotide polymorphism haplotype of NFKBIL1 promoter polymorphism by DNA conformation analysis and its application to association study of chronic inflammatory diseases. Hum. Immunol. 67: 363-373.
7. Greetham, D., et al. 2007. Functional characterization of NFκB inhibitor-like protein 1 (NFκBIL1), a candidate susceptibility gene for rheumatoid arthritis. Hum. Mol. Genet. 16: 3027-3036.
8. Ramasawmy, R., et al. 2008. Variants in the promoter region of IKBL/NFKBIL1 gene may mark susceptibility to the development of chronic Chagas' cardiomyopathy among Trypanosoma cruzi-infected individuals. Mol. Immunol. 45: 283-288.

CHROMOSOMAL LOCATION

Genetic locus: NFKBIL1 (human) mapping to 6p21.33; Nfkbil1 (mouse) mapping to 17 B1.

SOURCE

NFKBIL1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NFKBIL1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-109336 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NFKBIL1 (C-14) is recommended for detection of NFKBIL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

NFKBIL1 (C-14) is also recommended for detection of NFKBIL1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NFKBIL1 siRNA (h): sc-95606, NFKBIL1 siRNA (m): sc-149943, NFKBIL1 shRNA Plasmid (h): sc-95606-SH, NFKBIL1 shRNA Plasmid (m): sc-149943-SH, NFKBIL1 shRNA (h) Lentiviral Particles: sc-95606-V and NFKBIL1 shRNA (m) Lentiviral Particles: sc-149943-V.

Molecular Weight of NFKBIL1: 43 kDa.

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) 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.

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.

PROTOCOLS

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