

NFKBIL1 (C-5): sc-518230

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, NFκB1/p105, NFκB1/p50, REL and NFκB2/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 IKBL 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 (NFKBIL1), a candidate susceptibility gene for rheumatoid arthritis. *Hum. Mol. Genet.* 16: 3027-3036.

CHROMOSOMAL LOCATION

Genetic locus: NFKBIL1 (human) mapping to 6p21.33.

SOURCE

NFKBIL1 (C-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 220-246 of NFKBIL1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NFKBIL1 (C-5) is recommended for detection of NFKBIL1 of human origin by Western Blotting (starting dilution 1:100, 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

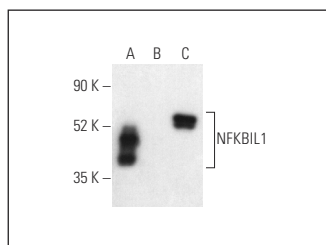
Molecular Weight of NFKBIL1: 43 kDa.

Positive Controls: NFKBIL1 (h): 293T Lysate: sc-369815.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



NFKBIL1 (C-5): sc-518230. Western blot analysis of NFKBIL1 expression in human recombinant NFKBIL1 fusion protein (A), non-transfected: sc-117752 (B) and human NFKBIL1 transfected: sc-369815 (C) 293T whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.

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 for detailed protocols and support products.