



# NFR $\kappa$ B (S-17): sc-109341

## BACKGROUND

NF $\kappa$ B (nuclear factor  $\kappa$ B) is a ubiquitously expressed transcriptional regulator that, when stimulated, can activate transcription of several genes encoding proteins involved in cell cycle control, cell adhesion and programmed cell death. NFR $\kappa$ B (nuclear factor related to  $\kappa$ B-binding protein), also known as DNA-binding protein R  $\kappa$ B, is a nuclear protein that binds to the DNA consensus sequence 5'-GGGGAATCTCC-3' of NF $\kappa$ B. Binding of NFR $\kappa$ B is thought to regulate IL-2R $\alpha$  (interleukin-2 receptor  $\alpha$  chain) gene expression, a critical step in T cell activation. NFR $\kappa$ B exists as three isoforms due to alternative splicing and is expressed primarily in the brain, liver, spleen, testis and thymus. NFR $\kappa$ B gene expression is amplified in acute myeloid leukemia, suggesting a possible role in carcinogenesis.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NFRKB (human) mapping to 11q24.3; Nfrkb (mouse) mapping to 9 A4.

## SOURCE

NFR $\kappa$ B (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NFR $\kappa$ B of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-109341 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-109341 X, 200  $\mu$ g/0.1 ml.

## APPLICATIONS

NFR $\kappa$ B (S-17) is recommended for detection of NFR $\kappa$ B 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).

Suitable for use as control antibody for NFR $\kappa$ B siRNA (h): sc-96360, NFR $\kappa$ B siRNA (m): sc-149945, NFR $\kappa$ B shRNA Plasmid (h): sc-96360-SH, NFR $\kappa$ B shRNA Plasmid (m): sc-149945-SH, NFR $\kappa$ B shRNA (h) Lentiviral Particles: sc-96360-V and NFR $\kappa$ B shRNA (m) Lentiviral Particles: sc-149945-V.

NFR $\kappa$ B (S-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NFR $\kappa$ B: 139 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](http://www.scbt.com) or our catalog for detailed protocols and support products.