SANTA CRUZ BIOTECHNOLOGY, INC.

NKRF (E-16): sc-54133

BACKGROUND

NKRF (NFκB-repressing factor), also known as transcription factor NRF or ITBA4 protein, is a ubiquitously expressed silencer protein. It localizes to the nucleoli but is also found in the nucleoplasm and contains one of each of the following nucleic acid binding domains: G-patch and R3H. NKRF represses the basal transcription of IFN-β, IL-8 and NOS2 by directly binding to their promoters. NKRF also binds to negative regulatory elements (NREs) and directly interacts with NFκB via its N-terminus. NKRF specifically inhibits the transcriptional activity of the NFκB proteins. In addition, NKRF contains a 5' untranslated region (UTR) that has internal ribosome entry segment (IRES) activity. The activity of the NKRF IRES module is decreased with the down-regulation of the RNA-binding protein, JKTBP1.

CHROMOSOMAL LOCATION

Genetic locus: NKRF (human) mapping to Xq24; Nkrf (mouse) mapping to X A3.3.

SOURCE

NKRF (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NKRF 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-54133 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-54133 P, (100 µg 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

NKRF (E-16) is recommended for detection of NFκB-repressing factor of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

NKRF (E-16) is also recommended for detection of NFκB-repressing factor in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NKRF siRNA (h): sc-72275, NKRF siRNA (m): sc-72276, NKRF shRNA Plasmid (h): sc-72275-SH, NKRF shRNA Plasmid (m): sc-72276-SH, NKRF shRNA (h) Lentiviral Particles: sc-72275-V and NKRF shRNA (m) Lentiviral Particles: sc-72276-V.

NKRF (E-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

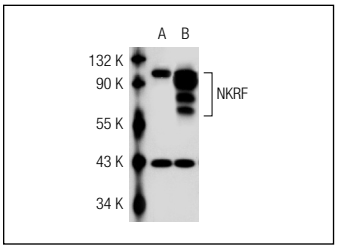
Molecular Weight of NKRF: 64 kDa.

Positive Controls: NKRF (h): 293T Lysate: sc-117208, A-431 whole cell lysate: sc-2201 or T24 cell lysate: sc-2292.

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



NKRF (E-16): sc-54133. Western blot analysis of NKRF expression in non-transfected: sc-117752 (**A**) and human NKRF transfected: sc-117208 (**B**) 293T whole cell lysates.

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.