SANTA CRUZ BIOTECHNOLOGY, INC.

NELF-B (G-18): sc-79992



BACKGROUND

NELF-B (negative elongation factor B), also known as COBRA1 (cofactor of BRCA1), is a 580 amino acid protein that localizes to the nucleus and exists as a component of the multi-protein NELF complex, a structure which negatively regulates Pol II-dependent transcription elongation. Expressed in a variety of tissues, including liver, heart, kidney, lung, brain, placenta and pancreas, NELF-B is involved in controlling transcriptional pausing of Pol II and may be able to induce chromatin unfolding, possibly playing a role in tumorigenesis. The gene encoding NELF-B maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

REFERENCES

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- McChesney, P.A., Aiyar, S.E., Lee, O.J., Zaika, A., Moskaluk, C., Li, R. and El-Rifai, W. 2006. Cofactor of BRCA1: a novel transcription factor regulator in upper gastrointestinal adenocarcinomas. Cancer Res. 66: 1346-1353.

CHROMOSOMAL LOCATION

Genetic locus: NELFB (human) mapping to 9q34.3; Nelfb (mouse) mapping to 2 A3.

SOURCE

NELF-B (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of NELF-B 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-79992 P, (100 μ 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-79992 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

NELF-B (G-18) is recommended for detection of NELF-B of mouse, rat and 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).

NELF-B (G-18) is also recommended for detection of NELF-B in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for NELF-B siRNA (h): sc-75896, NELF-B siRNA (m): sc-75897, NELF-B shRNA Plasmid (h): sc-75896-SH, NELF-B shRNA Plasmid (m): sc-75897-SH, NELF-B shRNA (h) Lentiviral Particles: sc-75896-V and NELF-B shRNA (m) Lentiviral Particles: sc-75897-V.

NELF-B (G-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

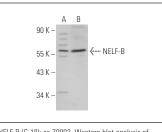
Molecular Weight of NELF-B: 62 kDa.

Positive Controls: ZR-75-1 cell lysate: sc-2241 or Jurkat whole cell lysate: sc-2204.

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



NELF-B (G-18): sc-79992. Western blot analysis of NELF-B expression in ZR-75-1 (A) and Jurkat (B) 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.

RESEARCH USE

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