

NELF-D (N-16): sc-85779

BACKGROUND

NELF-D (negative elongation factor C/D), also known as TH1, NELF-C, HSPC130 or TH1L, is a 590 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-D is involved in controlling transcriptional pausing of Pol II and may be able to induce chromatin unfolding, possibly playing a role in tumorigenesis. NELF-D is encoded by a gene which maps to human chromosome 20. Comprising approximately 2% of the human genome, chromosome 20 contains nearly 63 million bases that encode over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome. Additionally, chromosome 20 contains a region with numerous genes which are thought important for seminal production and may be potential targets for male contraception.

CHROMOSOMAL LOCATION

GenetiGenetic locus: TH1L (human) mapping to 20q13.32; Th1l (mouse) mapping to 2 H4.

SOURCE

NELF-D (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of NELF-D 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-85779 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NELF-D (N-16) is recommended for detection of NELF-D 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); non cross-reactive with isoform NELF-D-2.

NELF-D (N-16) is also recommended for detection of NELF-D in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NELF-D siRNA (h): sc-75898, NELF-D siRNA (m): sc-149908, NELF-D shRNA Plasmid (h): sc-75898-SH, NELF-D shRNA Plasmid (m): sc-149908-SH, NELF-D shRNA (h) Lentiviral Particles: sc-75898-V and NELF-D shRNA (m) Lentiviral Particles: sc-149908-V.

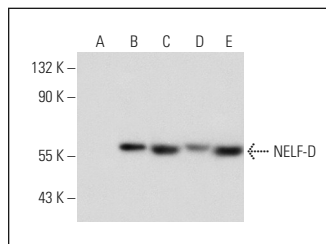
Molecular Weight of NELF-D: 59 kDa.

Positive Controls: MCF7 nuclear extract: sc-2149, NIH/3T3 nuclear extract: sc-2138 or NELF-D (m2): 293T Lysate: sc-127219.

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-D (N-16): sc-85779. Western blot analysis of NELF-D expression in non-transfected: sc-117752 (A) and mouse NELF-D transfected: sc-127219 (B) 293T whole cell lysates and HeLa (C), NIH/3T3 (D) and MCF7 (E) nuclear extracts.

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.



Try **NELF-D (C-10): sc-393972** or **NELF-D (C-7): sc-393628**, our highly recommended monoclonal alternatives to NELF-D (N-16).