

NELF-A (m): 293T Lysate: sc-122003

BACKGROUND

NELF-A, for negative elongation factor A, is a protein factor required for DRB-sensitive transcription. NELF-A is one of the five components of the multisubunit NELF complex that cooperates with DSIF to repress RNA polymerase II elongation. Control of transcription elongation requires a complex interplay between positive transcription elongation factor b (P-TEFb) and negative transcription elongation factors, DSIF and NELF. DSIF and NELF act as negative transcription elongation factors by increasing the time the polymerase spends at pause sites. DSIF/NELF inhibition of transcription is prevented by P-TEFb in cooperation with FACT. NELF-A is also known as WHSC2 (Wolf-Hirschhorn syndrome candidate 2). Wolf-Hirschhorn syndrome is a multiple malformation syndrome characterized by mental and developmental defects resulting from a hemizygous deletion of the distal short arm of chromosome 4 (4p16.3). The human NELF-A gene maps to chromosome 4p16.3 and encodes a 528 amino acid protein that is expressed in endothelial cells.

REFERENCES

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3. Wada, T., et al. 2000. FACT relieves DSIF/NELF-mediated inhibition of transcriptional elongation and reveals functional differences between P-TEFb and TFIIF. *Mol. Cell* 5: 1067-1072.
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CHROMOSOMAL LOCATION

Genetic locus: Whsc2 (mouse) mapping to 5 B2.

PRODUCT

NELF-A (m): 293T Lysate represents a lysate of mouse NELF-A transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

NELF-A (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive NELF-A antibodies. Recommended use: 10-20 µl per lane.

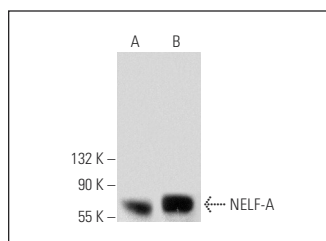
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NELF-A (F-2): sc-271731 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse NELF-A expression in NELF-A transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



NELF-A (F-2): sc-271731. Western blot analysis of NELF-A expression in non-transfected: sc-117752 (A) and mouse NELF-A transfected: sc-122003 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.