SANTA CRUZ BIOTECHNOLOGY, INC.

ELL (m): 293T Lysate: sc-120000

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Eukaryotic RNA polymerase II mediates the synthesis of mature and functional messenger RNA. This is a multistep process, called the transcription cycle, that includes five stages: preinitiation, promoter, clearance, elongation and termination. Elongation is thought to be a critical stage for the regulation of gene expression. ELL (11-19 lysine-rich leukemia protein, also designated MEN) functions as an RNA polymerase II elongation factor that increases the rate of transcription by suppressing transient pausing by RNA polymerase II. Also, ELL is thought to regulate cellular proliferation. ELL is abundantly expressed in peripheral blood leukocytes, skeletal muscle, placenta and testis, and has lower expression in spleen, thymus, heart, brain, lung, kidney, liver and ovary. The gene encoding human ELL, which maps to chromosome 19p13.11, is one of several genes which undergo translocation with the MLL gene on chromosome 11q23 in acute myeloid leukemia. MLL (myeloid/lymphoid leukemia, also designated ALL-1 and HRX) regulates embryonal and hematopoietic development.

REFERENCES

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3. Ennas, M.G., et al. 1997. The human ALL-1/MLL/HRX antigen is predominantly localized in the nucleus of resting and proliferating peripheral blood mononuclear cells. Cancer Res. 57: 2035-2041.
4. Shilatifard, A. 1998. Factors regulating the transcriptional elongation activity of RNA polymerase II. FASEB J. 12: 1437-1446.
5. Kanda, Y., et al. 1998. Overexpression of the MEN/ELL protein, an RNA polymerase II elongation factor, results in transformation of Rat1 cells with dependence on the lysine-rich region. J. Biol. Chem. 273: 5248-5252.
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7. Megonigal, M.D., et al. 2000. Panhandle PCR for cDNA: a rapid method for isolation of MLL fusion transcripts involving unknown partner genes. Proc. Natl. Acad. Sci. USA 97: 9597-9602.
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CHROMOSOMAL LOCATION

Genetic locus: Ell (mouse) mapping to 8 B3.3.

PRODUCT

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

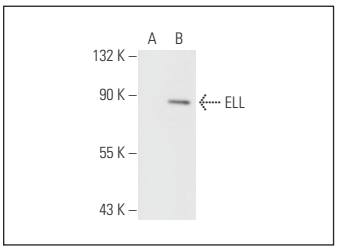
APPLICATIONS

ELL (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ELL 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.

ELL (2316C1a): sc-81264 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse ELL expression in ELL transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



ELL (2316C1a): sc-81264. Western blot analysis of ELL expression in non-transfected: sc-117752 (**A**) and mouse ELL transfected: sc-120000 (**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.

RESEARCH USE

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

PROTOCOLS

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