

ELL (G-17): sc-30727

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. It is also thought to regulate cellular proliferation. ELL is abundantly expressed in peripheral blood leukocytes, skeletal muscle, placenta and testis, with lower expression in spleen, thymus, heart, brain, lung, kidney, liver and ovary. The gene encoding human ELL, which maps to chromosome 19p13.1, is one of several genes that 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

1. Thirman, M.J., et al. 1994. Cloning of ELL, a gene that fuses to MLL in a t(11;19)(q23;p13.1) in acute myeloid leukemia. Proc. Natl. Acad. Sci. USA 91: 12110-12114.
2. Shilatifard, A., et al. 1997. Structure and function of RNA polymerase II elongation factor ELL. Identification of two overlapping ELL functional domains that govern its interaction with polymerase and the ternary elongation complex. J. Biol. Chem. 272: 22355-22363.
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.

CHROMOSOMAL LOCATION

Genetic locus: ELL (human) mapping to 19p13.11; Ell (mouse) mapping to 8 B3.3.

SOURCE

ELL (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ELL 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-30727 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

ELL (G-17) is recommended for detection of ELL 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).

ELL (G-17) is also recommended for detection of ELL in additional species, including equine, canine and bovine.

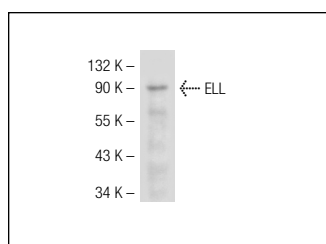
Suitable for use as control antibody for ELL siRNA (h): sc-38041, ELL siRNA (m): sc-38042, ELL shRNA Plasmid (h): sc-38041-SH, ELL shRNA Plasmid (m): sc-38042-SH, ELL shRNA (h) Lentiviral Particles: sc-38041-V and ELL shRNA (m) Lentiviral Particles: sc-38042-V.

Positive Controls: mouse testis extract: sc-2405 or mouse skeletal tissue extract.

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



ELL (G-17): sc-30727. Western blot analysis of ELL expression in mouse skeletal tissue extract.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

MONOS
Satisfaction
Guaranteed

Try **ELL (B-4): sc-398959** or **ELL (2316C1a): sc-81264**, our highly recommended monoclonal alternatives to ELL (G-17).