SANTA CRUZ BIOTECHNOLOGY, INC.

MLL (H-300): sc-20153

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. 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 11q23.3 in acute myeloid leukemia. MLL (myeloid/lymphoid leukemia, also designated ALL-1 and HRX) regulates embryonal and hematopoietic development.

CHROMOSOMAL LOCATION

Genetic locus: MLL (human) mapping to 11q23.3; Mll1 (mouse) mapping to 9 A5.2.

SOURCE

MLL (H-300) is a rabbit polyclonal antibody raised against amino acids 3301-3600 mapping within an internal region of MLL 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.

APPLICATIONS

MLL (H-300) is recommended for detection of MLL 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).

MLL (H-300) is also recommended for detection of MLL in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for MLL siRNA (h): sc-38039, MLL siRNA (m): sc-38040, MLL shRNA Plasmid (h): sc-38039-SH, MLL shRNA Plasmid (m): sc-38040-SH, MLL shRNA (h) Lentiviral Particles: sc-38039-V and MLL shRNA (m) Lentiviral Particles: sc-38040-V.

Molecular Weight of MLL: 430 kDa.

Molecular Weight of MLL N-Terminal cleavage: 320 kDa.

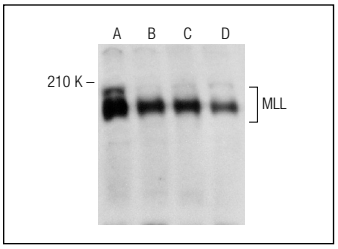
Molecular Weight of MLL C-Terminal cleavage: 180 kDa.

Positive Controls: CCRF-CEM nuclear extract: sc-2146, Jurkat nuclear extract: sc-2132 or MOLT-4 nuclear extract: sc-2151.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MLL (H-300): sc-20153. Western blot analysis of MLL expression in CCRF-CEM (**A**), Jurkat (**B**), MOLT-4 (**C**) and Ramos (**D**) 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.

MONOS Satisfaction Guaranteed

Try **MLL (D-3): sc-377274** or **MLL (H-10): sc-374392**, our highly recommended monoclonal alternatives to MLL (H-300).