SANTA CRUZ BIOTECHNOLOGY, INC.

Elp3 (yC-19): sc-26321

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The Power to Question

BACKGROUND

In *Saccharomyces cerevisiae*, the hyperphosphorylated form of RNA polymerase II (RNAP II) mediates transcription elongation, and associates with the Elongator complex, which contains six subunits. The Elongator complex can be separated into two subcomplexes; one consisting of Elp1, Elp2, and Elp3, and the other consisting of Elp4, Elp5, and Elp6. Mutations in any of the Elongator subunits confer similar phenotypes, which suggests that the Elp proteins function together. The Elongator complex acetylates both core histones and nucleosomal substrates, and directs its activity specifically towards the amino-terminal tails of histone H3 and H4. The Elongator complex predominantly acetylates lysine-14 of histone H3 and lysine-8 of histone H4. Elp3, the 60 kDa histone acetyltransferase subunit of the Elongator complex, is required for sufficient acetylation of histone H3 and H4. Cells deficient for Elp3 display slow growth adaptation, slow gene activation, and temperature sensitivity.

REFERENCES

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5. Winkler, G.S., Kristjuhan, A., Erdjument-Bromage, H., Tempst, P., and Svejstrup, J.Q. 2002. Elongator is a histone H3 and H4 acetyltransferase important for normal histone acetylation levels *in vivo*. Proc. Natl. Acad. Sci. USA 99: 3517-3522.
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SOURCE

Elp3 (yC-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Elp3 of *Saccharomyces cerevisiae* 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-26321 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Elp3 (yC-19) is recommended for detection of Elp3 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Elp3: 60 kDa.

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.

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.