



## Elp3 ( $\gamma$ -300): sc-98272

### 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. The Elongator complex acetylates both core histones and nucleosomal substrates, and directs its activity specifically towards the N-terminal tails of Histone H3 and Histone H4. Elp3, the histone acetyltransferase subunit of the Elongator complex, is required for sufficient acetylation of Histones H3 and H4. In mammals, ELP3 (elongation protein 3 homolog), also known as KAT9, is a 547 amino acid protein that localizes to both the nucleus and the cytoplasm and is a functional homolog of yeast Elp3. Like its yeast counterpart, ELP3 exists as a catalytic subunit of the Pol II elongator complex, thereby playing a role in Histone acetylation and chromatin remodeling. Multiple isoforms of ELP3 exist due to alternative splicing events.

### 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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### STORAGE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

### SOURCE

Elp3 ( $\gamma$ -300) is a rabbit polyclonal antibody raised against amino acids 258-557 mapping at the C-terminus of Elp3 of *Saccharomyces cerevisiae* origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

Elp3 ( $\gamma$ -300) is recommended for detection of Elp3 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

### 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.

### RESEARCH USE

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