

ELP3 (C-18): sc-323807

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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CHROMOSOMAL LOCATION

Genetic locus: ELP3 (human) mapping to 8p21.1; Elp3 (mouse) mapping to 14 D1.

SOURCE

ELP3 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ELP3 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-323807 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ELP3 (C-18) is recommended for detection of ELP3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with ELP4.

ELP3 (C-18) is also recommended for detection of ELP3 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for ELP3 siRNA (h): sc-106865, ELP3 siRNA (m): sc-144635, ELP3 shRNA Plasmid (h): sc-106865-SH, ELP3 shRNA Plasmid (m): sc-144635-SH, ELP3 shRNA (h) Lentiviral Particles: sc-106865-V and ELP3 shRNA (m) Lentiviral Particles: sc-144635-V.

Molecular Weight of ELP3: 62 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. 2) 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.

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.