SANTA CRUZ BIOTECHNOLOGY, INC.

ELP4 (E-12): sc-109532

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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. 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. An analogous complex exists in mammals and contains a variety of proteins that are functional homologs of their yeast counterparts. ELP4 (elongation protein 4), also known as PAX6NEB, is a 424 amino acid protein that localizes to both the cytoplasm and the nucleus and exists as a component of the Elongator complex. Widely expressed as multiple alternatively spliced isoforms, ELP4 is involved in transcriptional regulation and may play a role in chromatin remodeling.

REFERENCES

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: ELP4 (human) mapping to 11p13; Elp4 (mouse) mapping to 2 E3.

SOURCE

ELP4 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ELP4 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-109532 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ELP4 (E-12) is recommended for detection of ELP4 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).

ELP4 (E-12) is also recommended for detection of ELP4 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for ELP4 siRNA (h): sc-96714, ELP4 siRNA (m): sc-144636, ELP4 shRNA Plasmid (h): sc-96714-SH, ELP4 shRNA Plasmid (m): sc-144636-SH, ELP4 shRNA (h) Lentiviral Particles: sc-96714-V and ELP4 shRNA (m) Lentiviral Particles: sc-144636-V.

Molecular Weight of ELP4: 47 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or mouse brain extract: sc-2253.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.