

ELP4 (H-90): sc-98533

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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3. Kleinjan, D.A., Seawright, A., Elgar, G. and van Heyningen, V. 2002. Characterization of a novel gene adjacent to PAX6, revealing synteny conservation with functional significance. *Mamm. Genome* 13: 102-107.
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CHROMOSOMAL LOCATION

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

SOURCE

ELP4 (H-90) is a rabbit polyclonal antibody raised against amino acids 48-137 mapping near the N-terminus 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.

APPLICATIONS

ELP4 (H-90) 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), 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).

ELP4 (H-90) is also recommended for detection of ELP4 in additional species, including canine, bovine and porcine.

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.

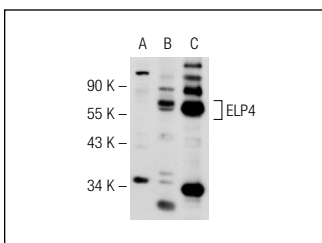
Molecular Weight of ELP4: 47 kDa.

Positive Controls: ELP4 (h): 293 Lysate: sc-113804, NIH/3T3 whole cell lysate: sc-2210 or mouse brain extract: sc-2253.

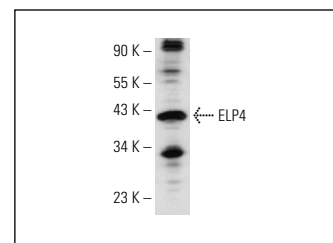
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use 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



ELP4 (H-90): sc-98533. Western blot analysis of ELP4 expression in non-transfected: sc-110760 (A) and human ELP4 transfected: sc-113804 (B) 293 whole cell lysates and mouse brain tissue extract (C).



ELP4 (H-90): sc-98533. Western blot analysis of ELP4 expression in NIH/3T3 nuclear extract.

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.