

## ELP6 (E-15): sc-100184

### 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. ELP6 (elongation protein 6), also known as C3orf75 or TMEM103, is a 266 amino acid protein and is a component of the elongator complex. Existing as two alternatively spliced isoforms, ELP6 is involved in transcriptional regulation and may play a role in cell migration.

### REFERENCES

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2. Kim, J.H., et al. 2002. Human Elongator facilitates RNA polymerase II transcription through chromatin. *Proc. Natl. Acad. Sci. USA* 99: 1241-1246.
3. Li, F., et al. 2004. The Elp4 subunit of human Elongator complex partially complements the growth defects of yeast ELP4 deletion strain. *Yi Chuan Xue Bao* 31: 668-674.
4. Nelissen, H., et al. 2005. The elongata mutants identify a functional Elongator complex in plants with a role in cell proliferation during organ growth. *Proc. Natl. Acad. Sci. USA* 102: 7754-7759.
5. Srokowski, et al. 2008. Development and characterisation of novel cross-linked bio-elastomeric materials. *J. Biomater. Sci. Polym. Ed.* 19: 785-799.
6. Strug, L.J., et al. 2009. Centrottemporal sharp wave EEG trait in rolandic epilepsy maps to elongator protein complex 4 (ELP4). *Eur. J. Hum. Genet.* 17: 1171-1181.
7. Close, P., et al. 2012. DERP6 (ELP5) and C3ORF75 (ELP6) regulate tumorigenicity and migration of melanoma cells as subunits of Elongator. *J. Biol. Chem.* 287: 32535-32545.
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### CHROMOSOMAL LOCATION

Genetic locus: ELP6 (human) mapping to 3p21.31; Elp6 (mouse) mapping to 9 F2.

### SOURCE

ELP6 (E-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ELP6 of human origin.

### STORAGE

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

### PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-100184 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

ELP6 (E-15) is recommended for detection of ELP6 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 other ELP family members.

ELP6 (E-15) is also recommended for detection of ELP6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ELP6 siRNA (h): sc-77950, ELP6 siRNA (m): sc-154341, ELP6 shRNA Plasmid (h): sc-77950-SH, ELP6 shRNA Plasmid (m): sc-154341-SH, ELP6 shRNA (h) Lentiviral Particles: sc-77950-V and ELP6 shRNA (m) Lentiviral Particles: sc-154341-V.

Molecular Weight of ELP6 isoform 1: 30 kDa.

Molecular Weight of ELP6 isoform 2: 28 kDa.

### 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) 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.

### PROTOCOLS

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