

Elongin C (56): sc-135895

BACKGROUND

Individuals harboring germline mutations in the tumor suppressor gene von Hippel-Lindau (VHL) exhibit an increased susceptibility to a variety of tumors including renal carcinoma, hemangioblastoma of the central nervous system and pheochromocytoma. The Elongin (SIII) complex has been identified as the functional target of the VHL protein. Elongin (SIII) is a heterotrimer composed of a transcriptional active subunit designated Elongin A and two regulatory subunits designated Elongin B and Elongin C. VHL functions by binding to the Elongin B and C subunits, inhibiting the transcriptional efficacy of the Elongin (SIII) complex.

REFERENCES

- Garrett, K.P., Tan, S., Bradsher, J.N., Lane, W.S., Conaway, J.W. and Conaway, R.C. 1994. Molecular cloning of an essential subunit of RNA polymerase II elongation factor SIII. *Proc. Natl. Acad. Sci. USA* 91: 5237-5241.
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- Waber, P.G., Lee, N.K. and Nisen, P.D. 1996. Frequent allelic loss at chromosome arm 3p is distinct from genetic alterations of the von Hippel-Lindau tumor suppressor gene in head and neck cancer. *Oncogene* 12: 365-369.

CHROMOSOMAL LOCATION

Genetic locus: TCEB1 (human) mapping to 8q21.11; Tceb1 (mouse) mapping to 1 A3.

SOURCE

Elongin C (56) is a mouse monoclonal antibody raised against amino acids 1-112 representing full length Elongin C of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Elongin C (56) is recommended for detection of Elongin C of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); not recommended for immunoprecipitation.

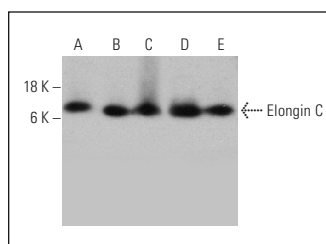
Elongin C (56) is also recommended for detection of Elongin C in additional species, including canine.

Suitable for use as control antibody for Elongin C siRNA (h): sc-37090, Elongin C siRNA (m): sc-37091, Elongin C shRNA Plasmid (h): sc-37090-SH, Elongin C shRNA Plasmid (m): sc-37091-SH, Elongin C shRNA (h) Lentiviral Particles: sc-37090-V and Elongin C shRNA (m) Lentiviral Particles: sc-37091-V.

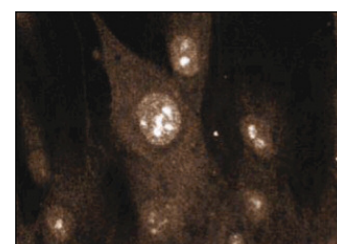
Molecular Weight of Elongin C: 15 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, PC-3 nuclear extract: sc-2152 or SK-BR-3 nuclear extract: sc-2134.

DATA



Elongin C (56): sc-135895. Western blot analysis of Elongin C expression in Hep G2 whole cell lysate (A), PC-3 (B), SK-BR-3 (C) and NIH/3T3 (D) nuclear extracts and mouse testis tissue extract (E).



Elongin C (56): sc-135895. Immunofluorescence staining of human fibroblast cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Uchida, T., Tamaki, Y., Ayaki, T., Shodai, A., Kaji, S., Morimura, T., Banno, Y., Nishitsuji, K., Sakashita, N., Maki, T., Yamashita, H., Ito, H., Takahashi, R. and Urushitani, M. 2016. CUL2-mediated clearance of misfolded TDP-43 is paradoxically affected by VHL in oligodendrocytes in ALS. *Sci. Rep.* 6: 19118.
- Sun, W., Kato, H., Kitajima, S., Lee, K.L., Gradin, K., Okamoto, T. and Poellinger, L. 2017. Interaction between von Hippel-Lindau protein and fatty acid synthase modulates hypoxia target gene expression. *Sci. Rep.* 7: 7190.

RESEARCH USE

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

PROTOCOLS

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