

Elongin C (R-20): sc-1559

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, hemangio-blastoma 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., et al. 1994. Molecular cloning of an essential subunit of RNA polymerase II elongation factor SIII. *Proc. Natl. Acad. Sci. USA* 91: 5237-5241.
- Krumm, A., et al. 1995. Tumor suppression and transcription elongation: the dire consequences of changing partners. *Science* 269: 1400-1401.

CHROMOSOMAL LOCATION

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

SOURCE

Elongin C (R-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Elongin C 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-1559 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Elongin C (R-20) 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), 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).

Elongin C (R-20) is also recommended for detection of Elongin C in additional species, including equine, canine, bovine, porcine and avian.

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.

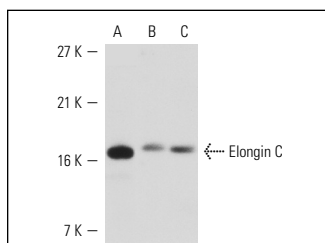
Molecular Weight of Elongin C: 15 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, F9 cell lysate: sc-2245 or mouse liver extract: sc-2256.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Elongin C (R-20): sc-1559. Western blot analysis of Elongin C expression in HeLa nuclear extract (A), F9 whole cell lysate (B) and mouse liver tissue extract (C).

SELECT PRODUCT CITATIONS

- Mohan, S., et al. 2003. von Hippel-Lindau protein complex is regulated by cell density. *Oncogene* 22: 5270-5280.
- Boggio, R., et al. 2007. Targeting SUMO E1 to ubiquitin ligases: a viral strategy to counteract sumoylation. *J. Biol. Chem.* 282: 15376-15382.
- Hacker, K.E., et al. 2008. VHL type 2B mutations retain VBC complex form and function. *PLoS ONE* 3: e3801.
- Yun, J., et al. 2009. Regulation of DNA topoisomerase II α stability by the ECV ubiquitin ligase complex. *Biochem. Biophys. Res. Commun.* 389: 5-9.

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.