

Elongin A (R-19): sc-1557

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.
- Duan, D.R., et al. 1995. Inhibition of transcription elongation by the VHL tumor suppressor protein. *Science* 269: 1402-1406.
- Aso, T., et al. 1995. Elongin (SIII): a multisubunit regulator of elongation by RNA polymerase II. *Science* 269: 1439-1443.
- Gross, D.J., et al. 1996. Familial pheochromocytoma associated with a novel mutation in the von Hippel-Lindau gene. *J. Clin. Endocrinol. Metab.* 81: 147-149.
- Waber, P.G., et al. 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: TCEB3 (human) mapping to 1p36.11; Tceb3 (mouse) mapping to 4 D3.

SOURCE

Elongin A (R-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Elongin A 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.

Elongin A (R-19) is available conjugated to agarose (sc-1557 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

Blocking peptide available for competition studies, sc-1557 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Elongin A (R-19) is recommended for detection of Elongin A 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).

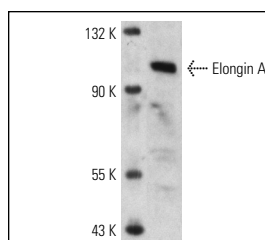
Elongin A (R-19) is also recommended for detection of Elongin A in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for Elongin A siRNA (h): sc-35292, Elongin A siRNA (m): sc-35293, Elongin A shRNA Plasmid (h): sc-35292-SH, Elongin A shRNA Plasmid (m): sc-35293-SH, Elongin A shRNA (h) Lentiviral Particles: sc-35292-V and Elongin A shRNA (m) Lentiviral Particles: sc-35293-V.

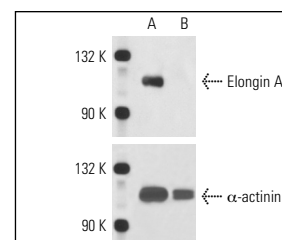
Molecular Weight of Elongin A: 110 kDa.

Positive Controls: mouse testes extract: sc-2405, HeLa nuclear extract: sc-2120 or Jurkat nuclear extract: sc-2132.

DATA



Elongin A (R-19): sc-1557. Western blot analysis of Elongin A expression in Jurkat nuclear extract.



Elongin A siRNA (h): sc-35292. Western blot analysis of Elongin A expression in non-transfected control (A) and Elongin A siRNA transfected (B) Jurkat cells. Blot probed with Elongin A (R-19): sc-1557. α-actinin (H-2): sc-17829 used as specificity and loading control.

SELECT PRODUCT CITATIONS

- Polak, P.E., et al. 2003. ELL and EAF1 are Cajal body components that are disrupted in MLL-ELL leukemia. *Mol. Biol. Cell* 14: 1517-1528.
- Cooper, C.D., et al. 2011. Identification and characterization of peripheral T-cell lymphoma-associated SEREX antigens. *PLoS ONE* 6: e23916.

RESEARCH USE

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

MONOS
Satisfaction
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Try **Elongin A (A-5): sc-373811** or **Elongin A (F-11): sc-373812**, our highly recommended monoclonal alternatives to Elongin A (R-19).