SANTA CRUZ BIOTECHNOLOGY, INC.

Elongin A (F-11): sc-373812

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

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

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3. Duan, D.R., et al. 1995. Inhibition of transcription elongation by the VHL tumor suppressor protein. Science 269: 1402-1406.
4. Aso, T., et al. 1995. Elongin (SIII): a multisubunit regulator of elongation by RNA polymerase II. Science 269: 1439-1443.
5. Gross, D.J., et al. 1996. Familial pheochromocytoma associated with a novel mutation in the von Hippel-Lindau gene. J. Clin. Endocrin. Metab. 81: 147-149.
6. 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.
7. Yasukawa, T. et al. 2007. Functional characterization of a mammalian transcription factor, Elongin A. Biochem. Biophys. Res. Commun. 352: 237-243.
8. Miyata, K. et al. 2007. Induction of apoptosis and cellular senescence in mice lacking transcription elongation factor, Elongin A. Cell Death Differ. 14: 716-726.
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CHROMOSOMAL LOCATION

Genetic locus: TCEB3 (human) mapping to 1p36.11.

SOURCE

Elongin A (F-11) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Elongin A of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Elongin A (F-11) is recommended for detection of Elongin A of human origin by Western Blotting (starting dilution 1:100, 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).

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

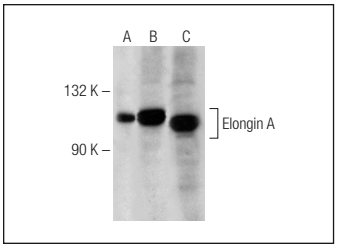
Molecular Weight of Elongin A: 110 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Jurkat nuclear extract: sc-2132 or MCF7 whole cell lysate: sc-2206.

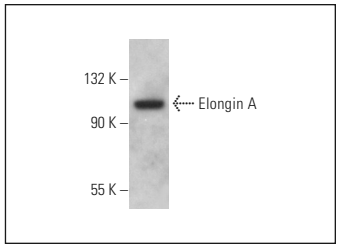
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Elongin A (F-11): sc-373812. Western blot analysis of Elongin A expression in 293T (**A**) and Jurkat (**B**) whole cell lysates and Jurkat nuclear extract (**C**).



Elongin A (F-11): sc-373812. Western blot analysis of Elongin A expression in MCF7 whole cell lysate.

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 for detailed protocols and support products.