

# Elongin A (A-5): sc-373811

## 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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- 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. Endocrin. 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.
- Yasukawa, T., et al. 2007. Functional characterization of a mammalian transcription factor, Elongin A. *Biochem. Biophys. Res. Commun.* 352: 237-243.

## CHROMOSOMAL LOCATION

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

## SOURCE

Elongin A (A-5) 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<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Elongin A (A-5) is available conjugated to agarose (sc-373811 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-373811 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-373811 PE), fluorescein (sc-373811 FITC), Alexa Fluor® 488 (sc-373811 AF488), Alexa Fluor® 546 (sc-373811 AF546), Alexa Fluor® 594 (sc-373811 AF594) or Alexa Fluor® 647 (sc-373811 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-373811 AF680) or Alexa Fluor® 790 (sc-373811 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

Elongin A (A-5) 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.

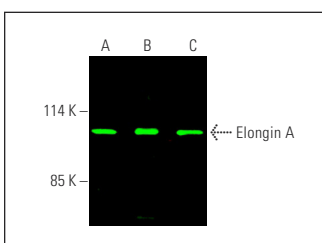
Molecular Weight of Elongin A: 110 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Jurkat nuclear extract: sc-2132 or HeLa nuclear extract: sc-2120.

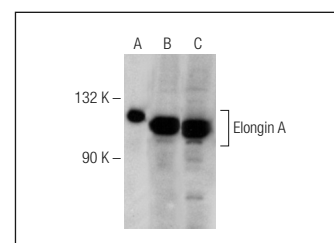
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 BPFITC: sc-516140 or m-IgGκ BPE: 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 (A-5): sc-373811. Near-Infrared western blot analysis of Elongin A expression in HeLa (A) and Jurkat (B) nuclear extracts and Jurkat whole cell lysate (C). Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BPF-CFL 680: sc-516180.



Elongin A (A-5): sc-373811. Western blot analysis of Elongin A expression in 293T (A) and Jurkat (B) whole cell lysates and Jurkat nuclear extract (C).

## 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.

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