# Elongin B (1-118): sc-4357 WB



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. The VHL protein migrates with an apparent molecular weight of 38 kDa. The Elongin A subunit is 773 amino acids in length and has an apparent molecular weight of 110 kDa, while Elongin B and C are 18 kDa and 15 kDa proteins, respectively.

## **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.
- Duan, D.R., Pause, A., Burgess, W.H., Aso, T., Chen, D.Y.T., Garrett, K.P., Conaway, R.C., Conaway, J.W., Linehan, W.M., and Klausner, R.D. 1995. Inhibition of transcription elongation by the VHL tumor suppressor protein. Science 269: 1402-1406.
- Krumm, A. and Groudine, M. 1995. Tumor suppression and transcription elongation: the dire consequences of changing partners. Science 269: 1400-1401.
- Aso, T., Lane, W.S., Conaway, J.W., and Conaway, R.C. 1995. Elongin (SIII): a multisubunit regulator of elongation by RNA polymerase II. Science 269: 1439-1443.
- Gross, D.J., Avishai, N., Meiner, V., Filon, D., Zbar, B., and Abeliovich, D. 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., 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.

## **SOURCE**

Elongin B (1-118) is expressed in *E. coli* as a 40 kDa tagged fusion protein of human origin corresponding to amino acids 1-118 representing full length Elongin B.

## **PRODUCT**

Elongin B (1-118) is purified from bacterial lysates (>98%) by column chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

## **APPLICATIONS**

Elongin B (1-118) is suitable as a Western blotting control for sc-1558 and sc-11447.

### **STORAGE**

Store at -20° C; stable for one year from the date of shipment.

### **RESEARCH USE**

For research use only, not for use in diagnostic procedures. For product citations, please visit our website at www.scbt.com

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com