

Elongin B (10C4): sc-53692

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

1. 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.
2. Krumm, A. and Groudine, M. 1995. Tumor suppression and transcription elongation: the dire consequences of changing partners. Science 269: 1400-1401.
3. 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.
4. 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.
5. 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. Endocrinol. 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.

CHROMOSOMAL LOCATION

Genetic locus: TCEB2 (human) mapping to 16p12.3; Tceb2 (mouse) mapping to 17 A3.3.

SOURCE

Elongin B (10C4) is a mouse monoclonal antibody raised against full length Elongin B of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

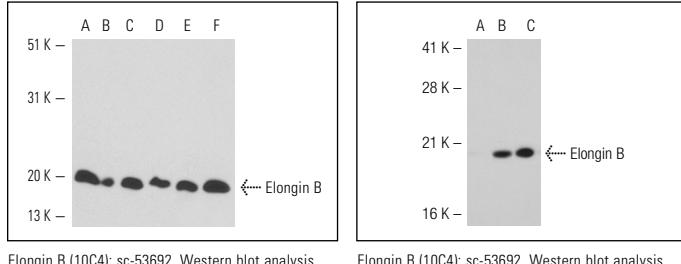
Elongin B (10C4) is recommended for detection of Elongin B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Elongin B siRNA (h): sc-35294, Elongin B shRNA Plasmid (h): sc-35294-SH and Elongin B shRNA (h) Lentiviral Particles: sc-35294-V.

Molecular Weight of Elongin B: 18 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat nuclear extract: sc-2132 or A-431 nuclear extract: sc-2122.

DATA



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.