

Su[fu] (h2): 293T Lysate: sc-170548

BACKGROUND

Su[fu] (for suppressor-of-fused) is a key negative regulator in the vertebrate hedgehog signaling pathway. Su[fu] interacts with genes encoding proteins in this signal transduction pathway. In *Drosophila*, intracellular transduction of the hedgehog pathway involves the release of a large complex containing Su[fu]. Su[fu] inhibits the activity of the transcription factor Gli1 and interacts with Gli2, Gli3 and the serine/threonine kinase fused. Su[fu] is widely expressed in adult and embryonic tissues with higher expression in tissues patterned by Hedgehog signaling. The Su[fu] gene locus maps to a region that is deleted in glioblastomas, prostate cancer, malignant melanoma and endometrial cancer.

REFERENCES

1. Ruiz i Altaba, A. 1997. Catching a Gli-mpse of Hedgehog. *Cell* 90: 193-196.
2. Monnier, V., Dussillol, F., Alves, G., Lamour-Isnard, C. and Plessis, A. 1998. Suppressor of fused links fused and *Cubitus interruptus* on the Hedgehog signalling pathway. *Curr. Biol.* 8: 583-586.
3. Pearse, R.V. 2nd, Collier, L.S., Scott, M.P. and Tabin, C.J. 1999. Vertebrate homologs of *Drosophila* suppressor of fused interact with the Gli family of transcriptional regulators. *Dev. Biol.* 212: 323-336.
4. Methot, N. and Basler, K. 1999. Hedgehog controls limb development by regulating the activities of distinct transcriptional activator and repressor forms of *Cubitus interruptus*. *Cell* 96: 819-831.
5. Kogerman, P., Grimm, T., Kogerman, L., Krause, D., Unden, A.B., Sandstedt, B., Toftgard, R. and Zaphiropoulos, P.G. 1999. Mammalian suppressor-of-fused modulates nuclear-cytoplasmic shuttling of Gli-1. *Nat. Cell Biol.* 1: 312-319.
6. Stone, D.M., Murone, M., Luoh, S., Ye, W., Armanini, M.P., Gurney, A., Phillips, H., Brush, J., Goddard, A., et al. 1999. Characterization of the human suppressor of fused, a negative regulator of the zinc-finger transcription factor Gli. *J. Cell Sci.* 112: 4437-4448.

CHROMOSOMAL LOCATION

Genetic locus: SUFU (human) mapping to 10q24.32.

PRODUCT

Su[fu] (h2): 293T Lysate represents a lysate of human Su[fu] transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Su[fu] (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Su[fu] antibodies. Recommended use: 10-20 µl per lane.

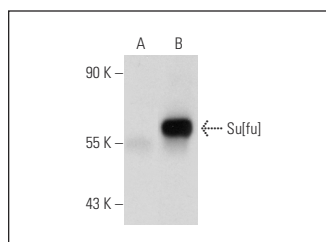
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Su[fu] (F-4): sc-137014 is recommended as a positive control antibody for Western Blot analysis of enhanced human Su[fu] expression in Su[fu] transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Su[fu] (F-4): sc-137014. Western blot analysis of Su[fu] expression in non-transfected: sc-117752 (A) and human Su[fu] transfected: sc-170548 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.