

# Su(fu) (H-300): sc-28847

## 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., et al. 1998. Suppressor-of-fused links fused and Cubitus interruptus on the hedgehog signalling pathway. *Curr. Biol.* 8: 583-586.

## CHROMOSOMAL LOCATION

Genetic locus: SUFU (human) mapping to 10q24.32; Sufu (mouse) mapping to 19 C3.

## SOURCE

Su(fu) (H-300) is a rabbit polyclonal antibody raised against amino acids 185-484 mapping at the C-terminus of suppressor of fused of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Su(fu) (H-300) is recommended for detection of Su(fu) 54 kDa form (484 amino acid splice variant) of mouse, rat and 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)], 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).

Su(fu) (H-300) is also recommended for detection of Su(fu) 54 kDa form (484 amino acid splice variant) in additional species, including equine, canine and avian.

Suitable for use as control antibody for Su(fu) siRNA (h): sc-36572, Su(fu) siRNA (m): sc-36573, Su(fu) shRNA Plasmid (h): sc-36572-SH, Su(fu) shRNA Plasmid (m): sc-36573-SH, Su(fu) shRNA (h) Lentiviral Particles: sc-36572-V and Su(fu) shRNA (m) Lentiviral Particles: sc-36573-V.

Molecular Weight of Su(fu): 54 kDa.

Positive Controls: C32 whole cell lysate: sc-2205, SK-N-SH cell lysate: sc-2410 or Su(fu) (h2): 293T Lysate: sc-170548.

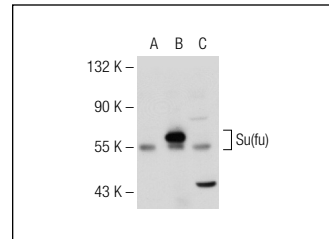
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

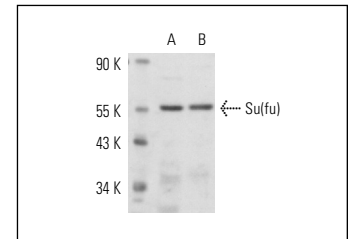
## STORAGE

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

## DATA



Su(fu) (H-300): sc-28847. Western blot analysis of Su(fu) expression in non-transfected 293T: sc-117752 (A), human Su(fu) transfected 293T: sc-170548 (B) and Jurkat (C) whole cell lysates.



Su(fu) (H-300): sc-28847. Western blot analysis of Su(fu) expression in C32 (A) and SK-N-SH (B) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Kim, K.H., et al. 2009. Expression of sonic hedgehog signaling molecules in normal, hyperplastic and carcinomatous endometrium. *Pathol. Int.* 59: 279-287.
2. Pizzimenti, S., et al. 2009. MicroRNA expression changes during human leukemic HL-60 cell differentiation induced by 4-hydroxynonenal, a product of lipid peroxidation. *Free Radic. Biol. Med.* 46: 282-288.
3. Jia, J., et al. 2009. Suppressor of fused inhibits mammalian hedgehog signaling in the absence of cilia. *Dev. Biol.* 330: 452-460.
4. Chen, M.H., et al. 2009. Cilium-independent regulation of Gli protein function by Sufu in Hedgehog signaling is evolutionarily conserved. *Genes Dev.* 23: 1910-1928.
5. Maloverjan, A., et al. 2010. Dual function of UNC-51-like kinase 3 (Ulk3) in the Sonic hedgehog signaling pathway. *J. Biol. Chem.* 285: 30079-30090.
6. Zeng, H., et al. 2010. Coordinated translocation of mammalian Gli proteins and suppressor of fused to the primary cilium. *PLoS ONE* 5: e15900.
7. Hsu, S.H., et al. 2011. Kif7 promotes hedgehog signaling in growth plate chondrocytes by restricting the inhibitory function of Sufu. *Development* 138: 3791-3801.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **Su(fu) (F-4): sc-137014**, our highly recommended monoclonal alternative to Su(fu) (H-300).