

Su(fu) (C-15): sc-10933

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.

CHROMOSOMAL LOCATION

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

SOURCE

Su(fu) (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Su 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.

Blocking peptide available for competition studies, sc-10933 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Su(fu) (C-15) 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) (C-15) is also recommended for detection of Su(fu) 54 kDa form (484 amino acid splice variant) in additional species, including equine, canine, porcine 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: Su(fu) (h2): 293T Lysate: sc-170548, C32 whole cell lysate: sc-2205 or IMR-32 cell lysate: sc-2409.

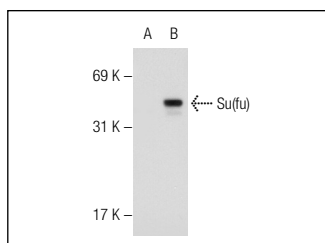
STORAGE

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

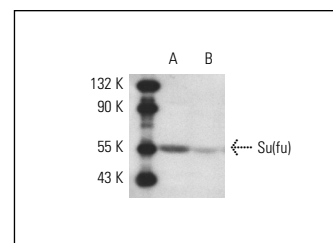
RESEARCH USE

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

DATA



Su(fu) (C-15): sc-10933. 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.



Su(fu) (C-15): sc-10933. Western blot analysis of Su(fu) expression in C32 (A) and IMR-32 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Dunaeva, M., et al. 2003. Characterization of the physical interaction of GLI proteins with Su(fu) proteins. *J. Biol. Chem.* 278: 5116-5122.
- Svärd, J., et al. 2006. Genetic elimination of suppressor of fused reveals an essential repressor function in the mammalian hedgehog signaling pathway. *Dev. Cell* 10: 187-197.
- Luath, M., et al. 2007. Inhibition of GLI-mediated transcription and tumor cell growth by small-molecule antagonists. *Proc. Natl. Acad. Sci. USA* 104: 8455-8460.
- Chatel, G., et al. 2007. Hedgehog signaling pathway is inactive in colorectal cancer cell lines. *Int. J. Cancer* 121: 2622-2627.
- Yue, S., et al. 2008. Hedgehog signaling promotes the degradation of tumor suppressor Su(fu) through the ubiquitin-proteasome pathway. *Oncogene* 28: 492-499.
- 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.
- Chen, Y., et al. 2011. Dual phosphorylation of suppressor of fused (Sufu) by PKA and GSK3β regulates its stability and localization in the primary cilium. *J. Biol. Chem.* 286: 13502-13511.
- Buczkwicz, P., et al. 2011. GLI2 is a potential therapeutic target in pediatric medulloblastoma. *J. Neuropathol. Exp. Neurol.* 70: 430-437.
- Erdogan, B., et al. 2011. Diagnostic microRNAs in myelodysplastic syndrome. *Exp. Hematol.* 39: 915-926.


 MONOS
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Try **Su(fu) (F-4): sc-137014**, our highly recommended monoclonal alternative to Su(fu) (C-15).