



<http://www.uniprot.org/citations/22365972> target="\_blank">22365972</a>, PubMed:<a href="http://www.uniprot.org/citations/24217340" target="\_blank">24217340</a>, PubMed:<a href="http://www.uniprot.org/citations/24311597" target="\_blank">24311597</a>, PubMed:<a href="http://www.uniprot.org/citations/27234298" target="\_blank">27234298</a>, PubMed:<a href="http://www.uniprot.org/citations/28965847" target="\_blank">28965847</a>). Down-regulates GLI1-mediated transactivation of target genes (PubMed:<a href="http://www.uniprot.org/citations/15367681" target="\_blank">15367681</a>, PubMed:<a href="http://www.uniprot.org/citations/24217340" target="\_blank">24217340</a>, PubMed:<a href="http://www.uniprot.org/citations/24311597" target="\_blank">24311597</a>). Down-regulates GLI2-mediated transactivation of target genes (PubMed:<a href="http://www.uniprot.org/citations/24217340" target="\_blank">24217340</a>, PubMed:<a href="http://www.uniprot.org/citations/24311597" target="\_blank">24311597</a>). Part of a corepressor complex that acts on DNA-bound GLI1. May also act by linking GLI1 to BTRC and thereby targeting GLI1 to degradation by the proteasome (PubMed:<a href="http://www.uniprot.org/citations/10559945" target="\_blank">10559945</a>, PubMed:<a href="http://www.uniprot.org/citations/10564661" target="\_blank">10564661</a>, PubMed:<a href="http://www.uniprot.org/citations/10806483" target="\_blank">10806483</a>, PubMed:<a href="http://www.uniprot.org/citations/24217340" target="\_blank">24217340</a>). Sequesters GLI1, GLI2 and GLI3 in the cytoplasm, this effect is overcome by binding of STK36 to both SUFU and a GLI protein (PubMed:<a href="http://www.uniprot.org/citations/10559945" target="\_blank">10559945</a>, PubMed:<a href="http://www.uniprot.org/citations/10564661" target="\_blank">10564661</a>, PubMed:<a href="http://www.uniprot.org/citations/10806483" target="\_blank">10806483</a>, PubMed:<a href="http://www.uniprot.org/citations/24217340" target="\_blank">24217340</a>). Negative regulator of beta-catenin signaling (By similarity). Regulates the formation of either the repressor form (GLI3R) or the activator form (GLI3A) of the full-length form of GLI3 (GLI3FL) (PubMed:<a href="http://www.uniprot.org/citations/24311597" target="\_blank">24311597</a>, PubMed:<a href="http://www.uniprot.org/citations/28965847" target="\_blank">28965847</a>). GLI3FL is complexed with SUFU in the cytoplasm and is maintained in a neutral state (PubMed:<a href="http://www.uniprot.org/citations/24311597" target="\_blank">24311597</a>, PubMed:<a href="http://www.uniprot.org/citations/28965847" target="\_blank">28965847</a>). Without the Hh signal, the SUFU- GLI3 complex is recruited to cilia, leading to the efficient processing of GLI3FL into GLI3R (PubMed:<a href="http://www.uniprot.org/citations/24311597" target="\_blank">24311597</a>, PubMed:<a href="http://www.uniprot.org/citations/28965847" target="\_blank">28965847</a>). When Hh signaling is initiated, SUFU dissociates from GLI3FL and the latter translocates to the nucleus, where it is phosphorylated, destabilized, and converted to a transcriptional activator (GLI3A) (PubMed:<a href="http://www.uniprot.org/citations/24311597" target="\_blank">24311597</a>, PubMed:<a href="http://www.uniprot.org/citations/28965847" target="\_blank">28965847</a>). Required for normal embryonic development (By similarity). Required for the proper formation of hair follicles and the control of epidermal differentiation (By similarity).

#### Cellular Location

Cytoplasm. Nucleus

#### Tissue Location

Ubiquitous in adult tissues. Detected in osteoblasts of the perichondrium in the developing limb of 12-week old embryos. Isoform 1 is detected in fetal brain, lung, kidney and testis Isoform 2 is detected in fetal testis, and at much lower levels in fetal brain, lung and kidney.

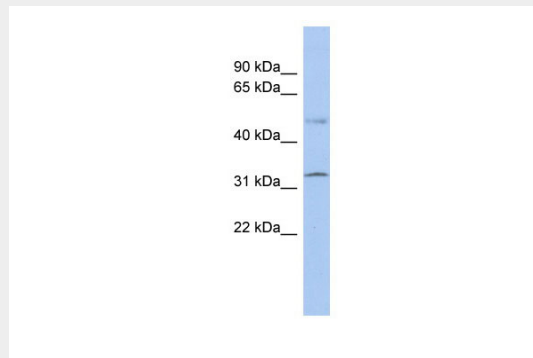
#### SUFU antibody - middle region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **SUFU antibody - middle region - Images**



WB Suggested Anti-SUFU Antibody Titration: 0.2-1  $\mu\text{g/ml}$   
ELISA Titer: 1:312500  
Positive Control: PANC1 cell lysate

#### **SUFU antibody - middle region - References**

Lee, D.Y., (2007) Proc. Natl. Acad. Sci. U.S.A. 104 (51), 20350-20355 Reconstitution and Storage: For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.