

[>22365972, PubMed:24217340, PubMed:24311597, PubMed:27234298, PubMed:28965847\).](http://www.uniprot.org/citations/22365972)

Down-regulates GLI1-mediated transactivation of target genes (PubMed:15367681, PubMed:24217340, PubMed:24311597).

Down-regulates GLI2-mediated transactivation of target genes (PubMed:24217340, PubMed:24311597). 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:10559945, PubMed:10564661, PubMed:10806483, PubMed:24217340). 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, PubMed:<a href="http://www.uniprot.org/citations/10564661"

target="_blank">10564661, PubMed:<a href="http://www.uniprot.org/citations/10806483"

target="_blank">10806483, PubMed:<a href="http://www.uniprot.org/citations/24217340"

target="_blank">24217340). 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, PubMed:<a href="http://www.uniprot.org/citations/28965847"

target="_blank">28965847). 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, PubMed:<a href="http://www.uniprot.org/citations/28965847"

target="_blank">28965847). Without the Hh signal, the SUFU- GLI3 complex is recruited to

cilia, leading to the efficient processing of GLI3FL into GLI3R (PubMed:24311597, PubMed:28965847). 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:24311597, PubMed:28965847).

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 - N-terminal 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](#)

