

SUFU antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI11517

Specification

SUFU antibody - middle region - Product Information

Application	WB, IHC
Primary Accession	Q9UMX1
Other Accession	NM_016169 , NP_057253
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Horse, Dog
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Chicken, Horse, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54kDa kDa

SUFU antibody - middle region - Additional Information

Gene ID 51684

Alias Symbol	PRO1280, SUFUH, SUFUXL
Other Names	
Suppressor of fused homolog, SUFUH, SUFU	

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-SUFU antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

SUFU antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

SUFU antibody - middle region - Protein Information

Name SUFU {ECO:0000303|PubMed:12068298, ECO:0000312|HGNC:HGNC:16466}

Function

Negative regulator in the hedgehog/smoothened signaling pathway (PubMed:10559945, PubMed:10564661, PubMed:10806483, PubMed:12068298, PubMed:12975309, PubMed:15367681, PubMed:<a

[>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.

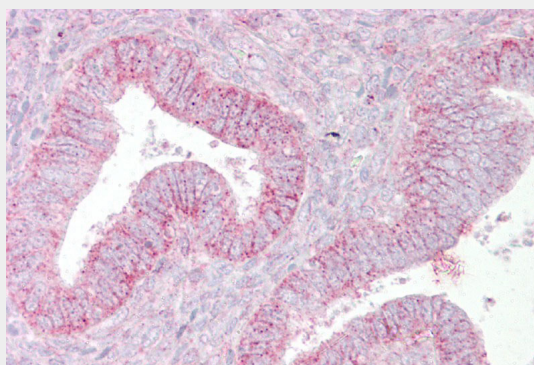
SUFU antibody - middle region - Protocols

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

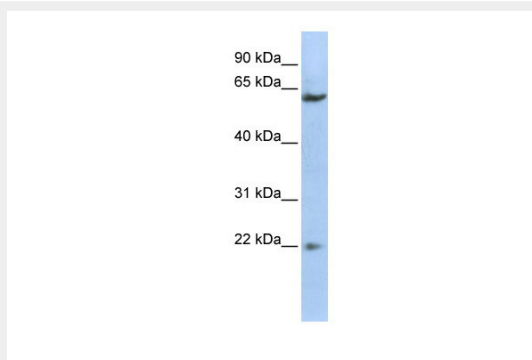
- [Western Blot](#)
- [Blocking Peptides](#)

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

SUFU antibody - middle region - Images



Immunohistochemistry with Uterus tissue at an antibody concentration of 5 μ g/ml using anti-SUFU antibody (AI11517)



WB Suggested Anti-SUFU Antibody Titration: 0.2-1 μ g/ml

ELISA Titer: 1:1562500

Positive Control: HepG2 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.