

**SUFU antibody - N-terminal region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI10454****Specification****SUFU antibody - N-terminal region - Product Information**

Application	WB
Primary Accession	<a href="#">O9UMX1</a>
Other Accession	<a href="#">NM_016169</a> , <a href="#">NP_057253</a>
Reactivity	Human, Mouse, Rat, Zebrafish, Pig, Horse, Bovine, Dog
Predicted	Human, Mouse, Rat, Zebrafish, Pig, Chicken, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54kDa KDa

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

**SUFU antibody - N-terminal region - Protein Information****Name** SUFU {ECO:0000303|PubMed:12068298, ECO:0000312|HGNC:HGNC:16466}**Function**

Negative regulator in the hedgehog/smoothened signaling pathway (PubMed:&lt;a href="http://www.uniprot.org/citations/10559945" target="\_blank"&gt;10559945&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/10564661" target="\_blank"&gt;10564661&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/10806483" target="\_blank"&gt;10806483&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/12068298" target="\_blank"&gt;12068298&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/12975309" target="\_blank"&gt;12975309&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/15367681" target="\_blank"&gt;15367681&lt;/a&gt;, PubMed:&lt;a

<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 - 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](#)

