10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SUFU antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI10657

Product Information

Application	WB
Primary Accession	Q9UMX1
Other Accession	NM_016169, NP_057253
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Pig, Chicken, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53947

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.

Protein Information

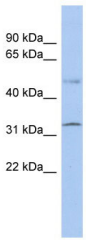
Name	SUFU {ECO:0000303|PubMed:12068298, ECO:0000312|HGNC:HGNC:16466}
Function	Negative regulator in the hedgehog/smoothened signaling pathway that acts by sequestering the GLI (GI1, GLI2 and GLI3) transcription factors in the cytoplasm (PubMed:10559945, PubMed:10564661, PubMed:10806483, PubMed:12068298, PubMed:12975309, PubMed:15367681, PubMed:22365972, PubMed:24217340, PubMed:24311597, PubMed:27234298, PubMed:28965847, PubMed:35831023). When smoothened signaling is initiated, GLI transcription factors dissociate from SUFU, translocate to the nucleus and activate expression of target genes (PubMed:24311597, PubMed:28965847, PubMed:35831023). In absence of smoothened signaling, the SUFU-GLI3 complex is recruited to cilia, leading to the efficient processing of full-length GLI3 into transcription repressor GLI3R:

	SUFU participates to GLI3 processing by promoting recruitment of GSK3B to GLI3 (PubMed:24311597, PubMed:28965847). May also act as a negative regulator of beta-catenin signaling (By similarity). 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. Cell projection, cilium {ECO:0000250|UniProtKB:Q9Z0P7}. Note=Recruited to cilia in response to smoothened signaling, leading to dissociation from GLI (GI1, GLI2 and GLI3) transcription factors. {ECO:0000250|UniProtKB:Q9Z0P7}
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.

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.

Images



WB Suggested Anti-SUFU Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:312500
Positive Control: PANC1 cell lysate

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.