

## **Product datasheet for TP507758**

## OriGene Technologies, Inc.

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## Sufu (NM\_001025391) Mouse Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Mouse SUFU negative regulator of hedgehog signaling (Sufu),

with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

**Expression cDNA Clone** >MR207758 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MAELRPSVAPGPAAPPASGPSAPPAFASLFPPGLHAIYGECRRLYPDQPNPLQVTAIVKYWLGGPDPLDY VSMYRNMGSPSANIPEHWHYISFGLSDLYGDNRVHEFTGTDGPSGFGFELTFRLKRETGESAPPTWPAEL MQGLARYVFQSENTFCSGDHVSWHSPLDNSESRIQHMLLTEDPQMQPVRTPFGVVTFLQIVGVCTEELH

S

AQQWNGQGILELLRTVPIAGGPWLITDMRRGETIFEIDPHLQERVDKGIETDGSNLSGVSAKCAWDDLSR PPEDEEDSRSICLGTQPRRLSGKDTEQIRETLRRGLEINSKPVLPPINSQRQNGLTHDRAPSRKDSLGSD SSTAIIPHELIRTRQLESVHLKFNQESGALIPLCLRGRLLHGRHFTYKSITGDMAITFVSTGVEGAFATE EHPYAAHGPWLQILLTEEFVEKMLEDLEDLTSPEEFKLPKEYSWPEKKLKVSILPDVVFDSPLH

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-MYC/DDK

**Predicted MW:** 54 kDa

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

**Storage:** Store at -80°C after receiving vials.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 001020562





## Sufu (NM\_001025391) Mouse Recombinant Protein - TP507758

**Locus ID:** 24069

 UniProt ID:
 Q9Z0P7

 RefSeq Size:
 4522

Cytogenetics: 19 38.85 cM

RefSeq ORF: 1452 Synonyms: Su(fu)

Summary: Negative regulator in the hedgehog/smoothened signaling pathway (PubMed:16155214,

PubMed:16459298). Down-regulates GLI1-mediated transactivation of target genes (PubMed:11960000). Part of a corepressor complex that acts on DNA-bound GLI1 (PubMed:11960000). May also act by linking GLI1 to BTRC and thereby targeting GLI1 to degradation by the proteasome (By similarity). Sequesters GLI1, GLI2 and GLI3 in the cytoplasm, this effect is overcome by binding of STK36 to both SUFU and a GLI protein (PubMed:10531011, PubMed:16459298). Negative regulator of beta-catenin signaling (PubMed:11477086). Regulates the formation of either the repressor form (GLI3R) or the activator form (GLI3A) of the full-length form of GLI3 (GLI3FL) (PubMed:10531011, PubMed:20360384). GLI3FL is complexed with SUFU in the cytoplasm and is maintained in a neutral state (PubMed:10531011, PubMed:20360384). Without the Hh signal, the SUFU-GLI3

neutral state (PubMed:10531011, PubMed:20360384). Without the Hh signal, the SUFU-GLI3 complex is recruited to cilia, leading to the efficient processing of GLI3FL into GLI3R (PubMed:10531011, PubMed:20360384). 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:10531011, PubMed:20360384). Required for normal embryonic development (PubMed:16155214, PubMed:16459298). Required for the proper formation of hair follicles and the control of epidermal differentiation (PubMed:16155214, PubMed:16459298, PubMed:23034632).

[UniProtKB/Swiss-Prot Function]