

Product datasheet for **TP507758**

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

MAELRPSVAPGPAAPPASGPSAPPAFASLFPPGLHAIYGECRRLYPDQPNPLQVTAIVKYWLGGPDPLDY
VSMYRNMGSPSANIPEHWHYISFGLSDLYGDNRVHEFTGTDGPSGFGFELTFRLKRETGESAPPTWPAEL
MQGLARYVFSSENTFCSGDHVSWHSPLDNSESRIQHMLLTEDPQMMPVTRPFGVVTFLQIVGVCTEELHS
AQQWNGQGILELLRTVPIAGGPWLITDMRRGETIFEIDPHLQERVVDKGIETDGSNLSGVSAKCAWDDLRSR
PPEDEEDSRICLGTQPRRLSGKDTEQIRETLRRGLEINSKPVLPINSQRQNGLTHDRAPSRKDSLGS
SSTAIIPHELIRTRQLESVHLKFNQESGALIPCLLRGRLHGRHFTYKSITGDMAITFVSTGVEGAFATE
EHPYAAHGWPWLQILLTEEFVEKMLEDLEDLTSPEEFKLPKEYSWPEKKLKVSIPLDVFVDSPLH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	54 kDa
Concentration:	>0.05 µg/µL 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
Locus ID:	24069



[View online »](#)

UniProt ID:	<u>Q9Z0P7</u>
RefSeq Size:	4522
Cytogenetics:	19 38.85 cM
RefSeq ORF:	1455
Synonyms:	Su(fu)
Summary:	<p>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 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]</p>