

Product datasheet for **RR212107**

Sav1 (NM_001097581) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Sav1 (NM_001097581) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Sav1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR212107 representing NM_001097581
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGTCCCGAAGAAAACAAAAACGAGGTGTCTAAGCCGGCCGAGGTTCCAGGGCAAGTACGTGAAGA
AGGAGACGTGCCCCCTGCTGCGGAATCTCATGCCTTCATTTCGGCACGGTCCAACAATCCAAGACG
GACTGACCTCTGTCTTCCAGAGTCAAGCGCTAGTCTTTCTCAGCTTCTGGAGATGGCGTAGTTTCAAGA
AACCAGAGTTTCTGAGAACTCCAGTTCAAAGGACGCCTCATGAAGTAATGAGAAGAGAAAGCAACAGAC
TGTCGCCACCGTCTTCTTACCTTGTCAGGAGCCTAGCGGATGTCCCTCGGAATACGGCTCATCACAGTC
ATTTTTAACAGAAGTTAATTTTGTGTTGAAAATGGAGACTCTGGTTCCCGATATTTTTATTAGATAAC
TTTTTTGATGGTCAGAGAAGGAGGCCACTTGGAGATCGTGCACAAGAAGACTATAGATATTATGAATACA
ACCATGATCTCTTCAAAGAATGCCACAGAATCAGGGGAGGCACACATCAGGATTGGGAGAGTCACTGC
TACATCTTAGGAAATTTAACTAACATGGATCTGAAGATTTACCCCTTCTCTGGCTGGTCTGTGGAC
TGGACAATGAGAGGGAGAAAATACTACATAGATCATAACACAAACACAACCTATTGGAGTCATCCTCTTG
AACGAGAAGGACTTCTCTGGGTGGGAGCGAGTGAATCATCAGAATTTGGAACCTATTATGTGGATCA
CACAAATAAAAGGCTCAGTACAGGCACCCCTGTGCTCCAGTGTGCCTCGGTATGATCAGCCTCCACCC
ATCACGTATCAGCCACAGCAAATGAAAGAAATCAGTCTCTCCTGGTCCCTGCAAACCCCTACCATACTG
CAGAAATTCCTGACTGGCTTCAGGTTTATGCCGAGCCCTGTGAAATACGACCACATTCTGAAGTGGGA
GCTCTTCCAGCTGGCTGACCTGGACACGTACCAGGGAATGCTGAAGTGTCTTTCATGAAGGAGCTGGAG
CAGATTGTCAAGTTGTATGAGGCCTACAGACAGGCTCTTGTACCAGCTGGAAAACCGCAAGCAGAGGC
AGCAGTGGTATGCCCAGCACCATGGCAAGAAGTTTTAAGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RR212107 representing NM_001097581
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MLSRKKTNEVSKPAEVQGGYVKKETSPLLRNLMPFSIRHGPTIPRRDLCLEPSSASAFSASGDGVVSR
 NQSFRLRTPVQRTPEVMRRESNRLSAPSSYLVRSLADVPREYGSQSFLTEVNFVAVENGDSGSRYFYSDN
 FFDGQRRRPLGDRAQEDYRYEYNHDLFQRMPPQNGRHTSGIGRVTATSLGNLTNHGSEDLPLPGWSVD
 WTMGRKYYIDHNTNTTHWSHPLERELPPGWERVESSEFGTYVVDHTNKRAQYRHPCAPSVPRYDQPPP
 ITYQPQQTERNQSLLVANPYHTAEIPDWLQVYARAPVKYDHILKWELFQLADLDYQGMKLLFMKELE
 QIVKLYEAYRQALVTELENRKQRQQWYAQHHGKKFLS

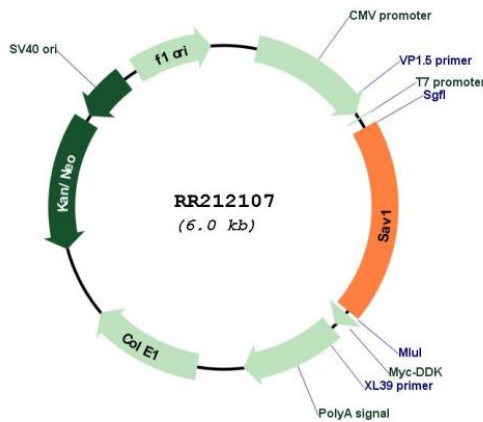
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001097581

ORF Size:	1161 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001097581.1 , NP_001091050.1
RefSeq Size:	2047 bp
RefSeq ORF:	1164 bp
Locus ID:	299116
UniProt ID:	A4V8B4
Cytogenetics:	6q24
MW:	45 kDa
Gene Summary:	Regulator of STK3/MST2 and STK4/MST1 in the Hippo signaling pathway which plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. The core of this pathway is composed of a kinase cascade wherein STK3/MST2 and STK4/MST1, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ. Phosphorylation of YAP1 by LATS1/2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration. SAV1 is required for STK3/MST2 and STK4/MST1 activation and promotes cell-cycle exit and terminal differentiation in developing epithelial tissues. Plays a role in centrosome disjunction by regulating the localization of NEK2 to centrosomes, and its ability to phosphorylate CROCC and CEP250. In conjunction with STK3/MST2, activates the transcriptional activity of ESR1 through the modulation of its phosphorylation (By similarity). [UniProtKB/Swiss-Prot Function]