

Product datasheet for **RN212107**

Sav1 (NM_001097581) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sav1 (NM_001097581) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Sav1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN212107 representing NM_001097581 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGTCCCGAAGAAAACAAAAACGAGGTGTCTAAGCCGGCCGAGGTTCCAGGGCAAGTACGTGAAGA
AGGAGACGTGCCCCCTGCTGCGGAATCTCATGCCTTCATTTCGACGCGGTCCAACAATCCAAGACG
GACTGACCTCTGTCTCCAGAGTCAAGCGCTAGTCTTCTCAGCTTCTGGAGATGGCGTAGTTTCAAGA
AACCCAGAGTTTCCCTGAGAACTCCAGTTCAAAGGACGCCTCATGAAGTAATGAGAAGAGAAAAGCAACAGAC
TGTCGCCACCGTCTTCTTACCTGTGAGGAGCCTAGCGGATGTCCCTCGGAATACGGCTCATCACAGTC
ATTTTTAACAGAAGTTAATTTTGTGTTGAAAATGGAGACTCTGGTTCCCGATATTTTTATTTCAGATAAC
TTTTTTGATGGTCAGAGAAGGAGGCCACTTGGAGATCGTGACAAGAAGACTATAGATATTATGAATACA
ACCATGATCTCTCAAAGAATGCCACAGAATCAGGGGAGGCACACATCAGGATTGGGAGAGTCACTGC
TACATCTTAGGAAATTTAACTAACCATGGATCTGAAGATTTACCCCTCCTCCTGGCTGGTCTGTGGAC
TGGACAATGAGAGGGAGAAAATACTACATAGATCATAACACAAAACAACACTATTGGAGTCATCCTCTTG
AACGAGAAGGACTTCTCCTGGGTGGGAGCGAGTGAATCATCAGAATTTGGAACCTATTATGTGGATCA
CACAAATAAAAGGCTCAGTACAGGCACCCCTGTGCTCCAGTGTGCCTCGGTATGATCAGCCTCCACCC
ATCACGTATCAGCCACAGCAAAGTAAAGAAATCAGTCTCTCCTGGTCCCTGCAAACCCCTACCATACTG
CAGAAATTCCTGACTGGCTTCAGGTTTATGCCCGAGCCCTGTGAAATACGACCACATTCTGAAGTGGGA
GCTCTCCAGCTGGCTGACCTGGACACGTACCAGGGAATGCTGAAGTGTCTTTCATGAAGGAGCTGGAG
CAGATTGTCAAGTTGATGAGGCCTACAGACAGGCTCTTGTACCAGGCTGGAAAACCGCAAGCAGAGGC
AGCAGTGGTATGCCACAGCACCATGGCAAGAAGTTTTAAGT**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	SgfI-MluI
ACCN:	NM_001097581



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Insert Size:	1164 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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
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]