

## Product datasheet for **RR212107L4V**

### Sav1 (NM\_001097581) Rat Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Sav1 (NM_001097581) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Sav1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001097581
ORF Size:	1161 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR212107).
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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_001097581.1</a> , <a href="#">NP_001091050.1</a>
RefSeq Size:	2047 bp
RefSeq ORF:	1164 bp
Locus ID:	299116
UniProt ID:	<a href="#">A4V8B4</a>
Cytogenetics:	6q24



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**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]