

## Product datasheet for RR214866L3V

## OriGene Technologies, Inc.

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## Fbxo9 (NM\_001011998) Rat Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: Fbxo9 (NM 001011998) Rat Tagged ORF Clone Lentiviral Particle

Symbol: Fbxo9

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

**ACCN:** NM\_001011998

ORF Size: 1305 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RR214866).

Sequence:
OTI Disclaimer:

Cytogenetics:

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.

**RefSeq:** <u>NM 001011998.1</u>, <u>NP 001011998.1</u>

8q31

 RefSeq Size:
 2155 bp

 RefSeq ORF:
 1308 bp

 Locus ID:
 300849

 UniProt ID:
 Q5U2X1







## **Gene Summary:**

Substrate recognition component of a SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of TTI1 and TELO2 in a CK2-dependent manner, thereby directly regulating mTOR signaling. SCF(FBXO9) recognizes and binds mTORC1-bound TTI1 and TELO2 when they are phosphorylated by CK2 following growth factor deprivation, leading to their degradation. In contrast, the SCF(FBXO9) does not mediate ubiquitination of TTI1 and TELO2 when they are part of the mTORC2 complex. As a consequence, mTORC1 is inactivated to restrain cell growth and protein translation, while mTORC2 is activated due to the relief of feedback inhibition by mTORC1 (By similarity).[UniProtKB/Swiss-Prot Function]