

## Product datasheet for **TR701510**

### **Fbxo9 Rat shRNA Plasmid (Locus ID 300849)**

#### **Product data:**

<b>Product Type:</b>	shRNA Plasmids
<b>Product Name:</b>	Fbxo9 Rat shRNA Plasmid (Locus ID 300849)
<b>Locus ID:</b>	300849
<b>Vector:</b>	pRS (TR20003)
<b>E. coli Selection:</b>	Ampicillin
<b>Mammalian Cell Selection:</b>	Puromycin
<b>Format:</b>	Retroviral plasmids
<b>Components:</b>	Fbxo9 - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 300849). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
<b>RefSeq:</b>	<u><a href="#">NM_001011998</a></u> , <u><a href="#">NM_001011998.1</a></u> , <u><a href="#">BC085831</a></u>
<b>UniProt ID:</b>	<u><a href="#">Q5U2X1</a></u>
<b>Summary:</b>	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]
<b>shRNA Design:</b>	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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**Performance  
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).