

## **Product datasheet for TR515804**

## Atg16l1 Mouse shRNA Plasmid (Locus ID 77040)

## **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** Atg16l1 Mouse shRNA Plasmid (Locus ID 77040)

**Locus ID:** 77040

**Synonyms:** 1500009K01Rik; Apg16l; Atg16l; WDR30

**Vector:** pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: Atg16I1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

77040). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

**RefSeq:** <u>BC049122</u>, <u>NM 001205391</u>, <u>NM 001205392</u>, <u>NM 029846</u>, <u>NM 029846.1</u>, <u>NM 029846.2</u>,

NM 029846.3, NM 029846.4, NM 001205392.1, NM 001205391.1, BC033362, BC052087

UniProt ID: Q8C0J2

Summary: Plays an essential role in autophagy: interacts with ATG12-ATG5 to mediate the conjugation

of phosphatidylethanolamine (PE) to LC3 (MAP1LC3A, MAP1LC3B or MAP1LC3C), to produce a membrane-bound activated form of LC3 named LC3-II. Thereby, controls the elongation of

the nascent autophagosomal membrane (PubMed:18849966, PubMed:12665549,

PubMed:24954904, PubMed:24553140, PubMed:23392225). Regulates mitochondrial antiviral signaling (MAVS)-dependent type I interferon (IFN-I) production (By similarity). Negatively regulates NOD1- and NOD2-driven inflammatory cytokine response (PubMed:24238340). Instead, promotes with NOD2 an autophagy-dependent antibacterial pathway. Plays a role in

regulating morphology and function of Paneth cell.[UniProtKB/Swiss-Prot Function]

shRNA Design: 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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.



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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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).