

## **Product datasheet for SC207642**

## LAMTOR1 (NM 017907) Human 3' UTR Clone

**Product data:** 

**Product Type:** 3' UTR Clones

Product Name: LAMTOR1 (NM\_017907) Human 3' UTR Clone

Symbol: LAMTOR1

Synonyms: C11orf59; p18; p27RF-Rho; PDRO; Ragulator1

**Mammalian Cell** 

Selection:

Neomycin

**Vector:** pMirTarget (PS100062)

**ACCN:** NM\_017907

**Insert Size:** 560 bp

Insert Sequence: >SC207642 3'UTR clone of NM\_017907

The sequence shown below is from the reference sequence of NM\_017907. The complete

sequence of this clone may contain minor differences, such as SNPs.

Blue=Stop Codon Red=Cloning site

GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAGGCCAAGAAGGGCGGAAAGATCGCCGTG

TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC

TTCATCCA

CGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGG

**Restriction Sites:** Sgfl-Mlul

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the sequence identifier above as a

point of reference. Note that the complete sequence of this clone is largely the same as the

reference sequence but may contain minor differences, e.g., single nucleotide

polymorphisms (SNPs).



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## LAMTOR1 (NM\_017907) Human 3' UTR Clone - SC207642

**Components:** The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The

package also includes 100 pmols of both the corresponding 5' and 3' vector primers in

separate vials.

**RefSeq:** <u>NM 017907.3</u>

**Summary:** As part of the Ragulator complex it is involved in amino acid sensing and activation of

mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids. Activated by amino acids through a mechanism involving the lysosomal V-ATPase, the Ragulator functions as a guanine nucleotide exchange factor

activating the small GTPases Rag. Activated Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated. LAMTOR1 is directly responsible

for anchoring the Ragulator complex to membranes. Also required for late

endosomes/lysosomes biogenesis it may regulate both the recycling of receptors through endosomes and the MAPK signaling pathway through recruitment of some of its components to late endosomes. May be involved in cholesterol homeostasis regulating LDL uptake and cholesterol release from late endosomes/lysosomes. May also play a role in RHOA activation.

[UniProtKB/Swiss-Prot Function]

**Locus ID:** 55004 **MW:** 20.6