

Product datasheet for RC209099

C7orf59 (LAMTOR4) (NM_001008395) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Tag: Myc-DDK

Symbol: C7orf59

Synonyms: C7orf59

Mammalian Cell Selection: Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >RC209099 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTTCTGCACTGACCCAGGGGCTGGAGCGAATCCCAGACCAGCTCGGCTACCTGGTACTGAGTGAAG
GTGCAGTGTGGCGTCATCTGGGGACCTGGAGAATGATGAGCAGGCAGCCAGTCCCATCTGAACTGGT
CAGCACAGCCTGCGGTTCCGGCTGCACCGCGGCATGAATGTGCCCTTCAAGCGCCTGTCTGTGGTCTTT
GGAGAACACACACTGCTGGTGACGGTGTGAGGACAGAGGGTGTGTTGGTGAAGAGGCAGAACCGAGGTC
GGGAGCCCATGATGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA

Protein Sequence: >RC209099 protein sequence
Red=Cloning site Green=Tags(s)

MTSALTQGLERIPDQLGYLVLSEGA VLASSGDLENDEQAASAI SELVSTACGFRLHRGMNVPFKRLSVVF
GEHTLLVTVSGQRV FVVKRQNRGREPIDV

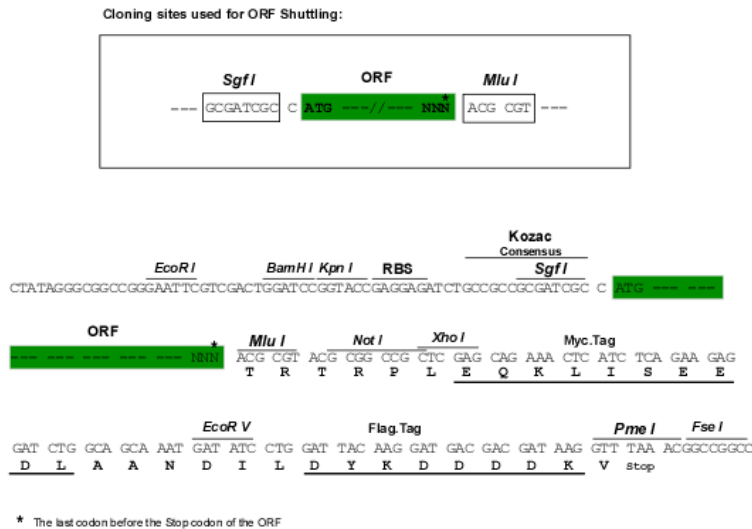
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6546_a10.zip

Restriction Sites: SgfI-MluI



Cloning Scheme:



ACCN: NM_001008395

ORF Size: 297 bp

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. [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.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001008395.1](#), [NP_001008396.1](#)

RefSeq Size: 613 bp

RefSeq ORF: 300 bp

Locus ID: 389541

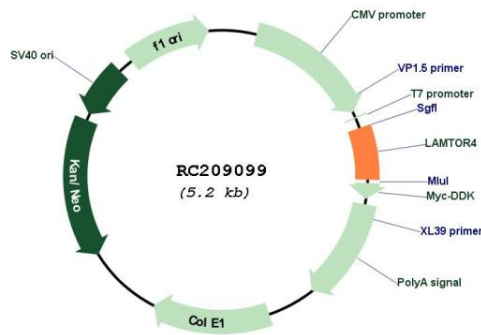
UniProt ID: [Q0VGL1](#)

Cytogenetics: 7q22.1

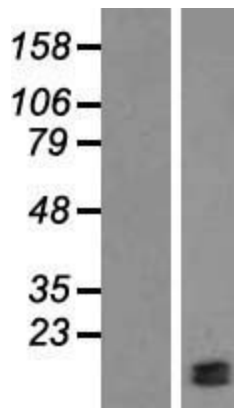
MW: 10.7 kDa

Gene 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.[UniProtKB/Swiss-Prot Function]

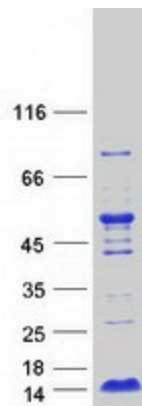
Product images:



Circular map for RC209099



Western blot validation of overexpression lysate (Cat# [LY423422]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209099 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LAMTOR4 protein (Cat# [TP309099]). The protein was produced from HEK293T cells transfected with LAMTOR4 cDNA clone (Cat# RC209099) using MegaTran 2.0 (Cat# [TT210002]).