

Product datasheet for MR204691

Tmem59 (NM_029565) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tmem59 (NM_029565) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tmem59
Synonyms:	1110001M20Rik; 3110046P06Rik; AI256529; D4ErtD20e; MTDCF1; ORF18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204691 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCGCAAAGGGGAAGCTTTGGGTCCAGGCCAACTGGGGCTCCCGCCGTGCTGCTGTTGACTA
TGGCGCTGGCCGGAGGCTCGGGGACTGCAGCGGCCGAAGCCTTTGACTCGGTCTGGGAGACACAGCGTC
CTGTACCAGGCTGTGAGCTGACCTACCCCTGCACACCTACCCGAAGGAAGAGGAGTTATACGCATGC
CAGAGAGGCTGCAGGCTGTTTTCAATTTGCCAGTTTGTGGATGATGGGCTTGATTTAAATCGACCAAGC
TGAATGTGAATCTGCGTGCACAGAAGCATATTCCCAACCTGATGAGCAGTATGCTTGCATCTTGGCTG
CCAGGATCAGTTGCCATTTGCTGAACTGAGACAAGAACAACCTCATGTCCCTGATGCCAAGAATGCATCTC
CTCTCCCTCTGACTCTGGTGAGGTCGTTCTGGAGTGACATGATGGACTCTGCACAGAGCTTCATAACCT
CTTCATGGACTTTTTATCTTCAAGCCGATGACGGAAAAATAGTTATATTCCAGTCTAAGCCAGAAATTC
GTATGCACCGCAGTTGGAGCAGGAGCCTACAACTTGAGAGAAATCATCTTTAAGCAAAATGTCCTATCTG
CAGATGAGAACTCACAAGCACACAGGAACCTACCTGAAGAGGAAGAAAGCGATGGCTTTTTAAGATGTC
TATCTCTAACTCTGGATGGATTTAACCACAACCCTTGCCTCTCGGTGATGGTGTGCTCTGGATCTG
TTGTGCAGCTGTTGCTACAGCTGTAGAACAGTATGTTCCCCTGAGAAGCTGAGTATCTATGGTGACTTG
GAATTTATGAATGAACAAAAGCTGAGCAGATACCCAGCTCCTTCTTTGTGATTGTTAGGTCTCAGACTG
AAGAATGAGGAGGCAGGGCCCCTGCCACCAAGGTGAACCTTGCTCACTCAGAAATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR204691 protein sequence
Red=Cloning site Green=Tags(s)

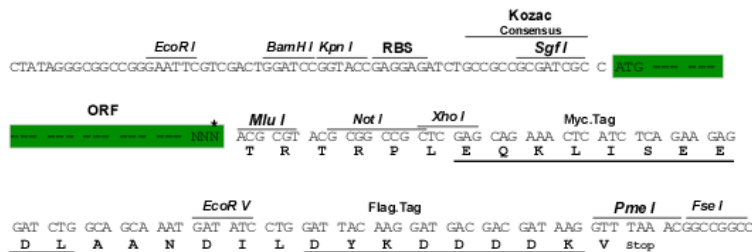
MAAPKGLWVQAQLGLPPLLLLTMALAGGSGTAAAEAFDSVLGDTASCHRACQLTYPLHTYPKEEELYAC
 QRGCR LFSICQFVDDGLDLNRTKLECESACTEAYSQPDEQYACHLGCQDQLPFAELRQEQLMSLMRPHL
 LFPLTLVRSFWSMDMSAQSFITSSWTFYLQADDGKIVIFQSKPEIQYAPQLEQEPTNLRESSLSKMSYL
 QMRNSQAHRNYLEEEESDGLRCLSLNSGWILTTTLVLSVMVLLWICCAAVATAVEQYVPPPEKLSIYGDL
 EFMNEQKLSRYPPAPSLVIVRSQTEEHHEEAGPLPTKVNLAHSEI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_029565

ORF Size: 972 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.

RefSeq: [NM_029565.3](#)

RefSeq Size: 1562 bp

RefSeq ORF: 972 bp

Locus ID: 56374

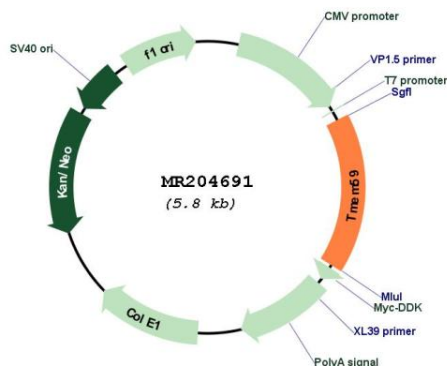
UniProt ID: [Q9QY73](#)

Cytogenetics: 4 50.12 cM

MW: 36.3 kDa

Gene Summary: Acts as a regulator of autophagy in response to *S.aureus* infection by promoting activation of LC3 (MAP1LC3A, MAP1LC3B or MAP1LC3C). Acts by interacting with ATG16L1, leading to promote a functional complex between LC3 and ATG16L1 and promoting LC3 lipidation and subsequent activation of autophagy. Modulates the O-glycosylation and complex N-glycosylation steps occurring during the Golgi maturation of several proteins such as APP, BACE1, SEAP or PRNP. Inhibits APP transport to the cell surface and further shedding. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR204691