

Product datasheet for **MR217099**

Tufm (NM_172745) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tufm (NM_172745) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tufm
Synonyms:	2300002G02Rik; C76308; C76389; EF-TuMT; EFTU
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR217099 representing NM_172745
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**C

ATGGCGGCAGCCACTCTATTGCGAGCGACGCCCCGCTTCAGCGGTCTCTGCGCCAGCCCGACCCATTTC
 TGCAAGGTCGGCTGCGGCCGCTGAAGGCTCCCGCATCACCTTCTTGTGTGCGCGCTAGCTGTGGAGGC
 CAAGAAGACTTATGTACGCGACAAGCCCATGTGAATGTGGGTACCATCGGACATGTGGACCATGGCAAG
 ACCACCCTGACTGCAGCCATCACGAAAATTCTAGCCGAGGGAGGTGGAGCTAAGTTCAAGAAGTACGAGG
 AGATAGACAATGCCCCAGAGGAGCGAGCTCGGGGCATCACCATCAATGCAGCCCATGTGGAGTATAGCAC
 TGCTGCCCCGACACTATGCCACACAGACTGTCTGGTCATGCAGATTATGTTAAGAATATGATCACAGGC
 ACTGCCCCCTGGATGGCTGTATCCTGGTGGTGGCAGCTAATGATGGCCCCATGCCCGAGCCGAGAGC
 ACTTACTGCTAGCTAAACAGATTGGGGTAGAACATGTTGTGGTGTACGTGAACAAGGCAGACGCTGTCCA
 GGACTCAGAGATGGTGGAGTTAGTCGAGCTGGAGATCCGGGAGCTGCTCACCGAGTTTGGCTATAAAGGA
 GAGGAAACTCCAGTCATCGTAGGCTCGGCTCTCTGTGCCCTTGAGCAACGTGACCCTGAGCTAGGCGTGA
 AGTCAGTGCAGAAGCTCCTGGATGCTGTGGACACCTACATCCCAGTGCCACCCGGGACCTGGACAAGCC
 CTTCTGCTCCCTGTAGAGTCAGTCTACTCTATTCTGCGCGGGGCACAGTGGTGACAGGTACATTAGAG
 CGTGGCATTTTGAAGAAAGGAGATGAGTGTGAGTTGCTGGGACATAACAAGAATCCGCACTGTGGTGA
 CAGGCATTGAGATGTTCCACAAGAGCCTGGAGAGGGCTGAGGCAGGGGATAACCTGGGTGCTCTGGTCCG
 AGGCTTAAAGCGCAAGATTTGAGGCGTGGCTTGGTCATGGTCAAGCCAGGCTCCATCCAACCCACCAG
 AAGGTGGAGGCCAGGTTTATATCCTCAGCAAGGAGGAAGGTGGCCGCCACAAACCCTTTGTATCTCATT
 TCATGCCCGTCATGTTCTCCCTGACCTGGGACATGGCCTGTCGAGTCATCTTGCTCCAGGGAAGGAAT
 TGCCATGCCTGGAGAGGACTTGAAGCTTAGTCTAATCTTGCGGCAGCCCATGATCTTAGAGAAAGGCCAA
 CGTTTCACCTTGAGGATGGCAACAAGACCATTGGCACTGGCCTTGTTACTGATGTACCAGCCATGACTG
 AGGAGGACAAGAATCAAGTGGAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR217099 representing NM_172745
 Red=Cloning site Green=Tags(s)

MAAATLLRATPRFSGLCASPTPFLQGRLRPLKAPASPFLCRGLAVEAKKTYVRDKPHVNVGTIGHVDHGK
 TTLTAAITKILAEAGGAKFKKYEEIDNAPEERARGITINAAHVEYSTAARHYAHTDCPHADYVKNMITG
 TAPLDGCILVVAANDGMPQTREHLLAKQIGVEHVVVYVKNADAVQDSEMVLEVEIRELLTEFGYKG
 EETPVIVGSALCALEQRDPELGVKSVQKLLDAVDYIIPVPTDLDPFLLPVESVYSIPGRGTVVTGTL
 RGILKKGDECELLGHNKNIRTVTGIEMFHKSLEAEAGDNLGALVRGLKREDLRRGLVMVKPGSIQPHQ
 KVEAQVYILSKEEGGRHKPFVSHFMPVMFSLTWDMAVRVILPPGKELAMPGEDLKLKSLILRQPMILEKGQ
 RFTLRDGNKTIGTGLVTDVPAMTEEDKNIKWS

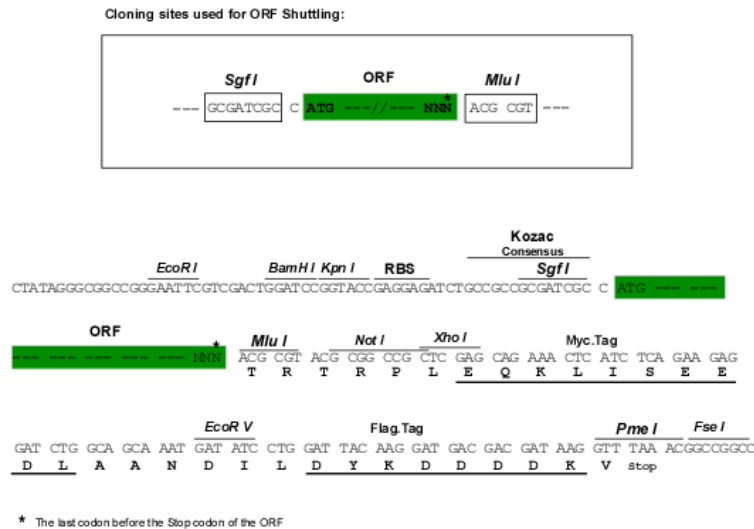
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9044_d01.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_172745

ORF Size: 1356 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_172745.3](#), [NP_766333.1](#)

RefSeq Size: 1718 bp

RefSeq ORF: 1359 bp

Locus ID: 233870

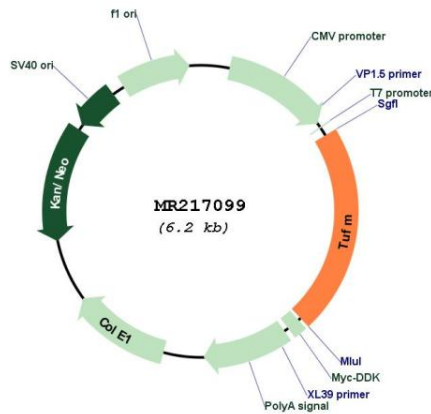
UniProt ID: Q8BFR5

Cytogenetics: 7 F3

MW: 50 kDa

Gene Summary: Promotes the GTP-dependent binding of aminoacyl-tRNA to the A-site of ribosomes during protein biosynthesis. Plays also a role in the regulation of autophagy and innate immunity. Recruits ATG5-ATG12 and NLRX1 at mitochondria and serves as a checkpoint of the RIG-I/DDX58-MAVS pathway. In turn, inhibits RLR-mediated type I interferon while promoting autophagy.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR217099