

Product datasheet for **MG217099**

Tufm (NM_172745) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tufm (NM_172745) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tufm
Synonyms:	2300002G02Rik; C76308; C76389; EF-TuMT; EFTU
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG217099 representing NM_172745
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**C

ATGGCGGCAGCCACTCTATTGCGAGCGACGCCCGCTTCAGCGGTCTCTGCGCCAGCCCGACCCATTTC
 TGCAAGGTCGGCTGCGGCCGCTGAAGGCTCCCGCATCACCTTCTTGTGTCGCGGCCTAGCTGTGGAGGC
 CAAGAAGACTTATGTACGCGACAAGCCCATGTGAATGTGGGTACCATCGGACATGTGGACCATGGCAAG
 ACCACCCTGACTGCAGCCATCACGAAAATTCTAGCCGAGGGAGGTGGAGCTAAGTTCAAGAAGTACGAGG
 AGATAGACAATGCCCCAGAGGAGCGAGCTCGGGGCATCACCATCAATGCAGCCCATGTGGAGTATAGCAC
 TGCTGCCCCGACACTATGCCACACAGACTGTCTGGTCATGCAGATTATGTTAAGAATATGATCACAGGC
 ACTGCCCCCTGGATGGCTGTATCCTGGTGGTGGCAGCTAATGATGGCCCATGCCCCAGACCCGAGAGC
 ACTTACTGCTAGCTAAACAGATTGGGGTAGAACATGTTGTGGTGTACGTGAACAAGGCAGACGCTGTCCA
 GGACTCAGAGATGGTGGAGTTAGTCGAGCTGGAGATCCGGGAGCTGCTCACCGAGTTTGGCTATAAAGGA
 GAGGAAACTCCAGTCATCGTAGGCTCGGCTCTCTGTGCCCTTGAGCAACGTGACCCTGAGCTAGGCGTGA
 AGTCAGTGCAGAAGCTCCTGGATGCTGTGGACCTACATCCCAGTGCCACCCGGGACCTGGACAAGCC
 CTTCTGCTCCCTGTAGAGTCAGTCTACTCTATTCTGCGCGGGGCACAGTGGTGACAGGTACATTAGAG
 CGTGGCATTTTGAAGAAAGGAGATGAGTGTGAGTTGCTGGGGCATAACAAGAATCCGCACTGTGGTGA
 CAGGCATTGAGATGTTCCACAAGAGCCTGGAGAGGGCTGAGGCAGGGGATAACCTGGGTGCTCTGGTCCG
 AGGCTTAAAGCGCAAGATTTGAGGCGTGGCTTGGTCATGGTCAAGCCAGGCTCCATCCAACCCACCAG
 AAGGTGGAGGCCAGGTTTATATCCTCAGCAAGGAGGAAGGTGGCCGCCACAAACCTTTGTATCTCATT
 TCATGCCCGTCATGTTCTCCCTGACCTGGGACATGGCCTGTCGAGTCATCTTGCTCCAGGAAGGAACT
 TGCCATGCCTGGAGAGGACTTGAAGCTTAGTCTAATCTTGCGGCAGCCCATGATCTTAGAGAAAGGCCAA
 CGTTTCACCTTGAGGGATGGCAACAAGACCATTGGCACTGGCCTTGTTACTGATGTACCAGCCATGACTG
 AGGAGGACAAGAATCAAGTGGAGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

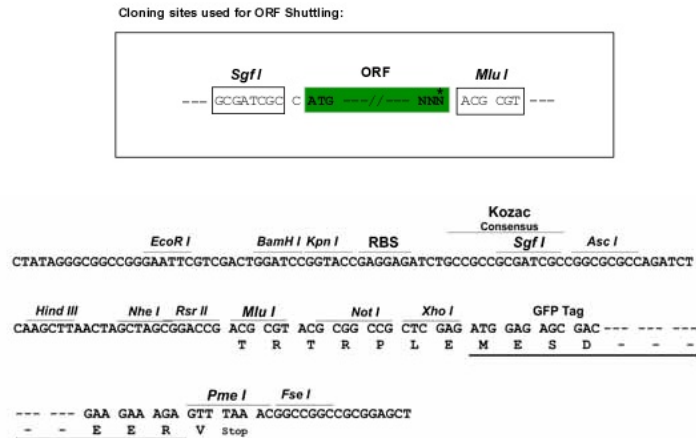
>MG217099 representing NM_172745
 Red=Cloning site Green=Tags(s)

MAAATLLRATPRFSGLCASPTPFLQGRLRPLKAPASPFLCRGLAVEAKKTYVRDKPHVNVGTIGHVDHGK
 TTLTAATKILAEAGGAKFKKYEEIDNAPEERARGITINAAHVEYSTAARHYAHTDCPGHADYVKNMITG
 TAPLDGCILVVAANDGPMPTREHLLAKQIGVEHVVVVYNKADAVQDSEMVELVELEIRELLTEFGYKG
 EETPVIVGSALCALEQRDPELGVKSVQKLLDAVDYIIPVPTRDLDKPFLLPVESVYSIPGRGTVVGTLE
 RGILKKGDECELLGHKNIRTVTGTIEMFHKSLERAEGDNLGALVRGLKREDLRRGLVMVKPGSIQPHQ
 KVEAQVYILSKEEGGRHKPFVSHFMPVMSLTWDMACRVILPPGKELAMPGEDLKLILRQPMILEKGQ
 RFTLRDGNKTIPTGLVTDVPAMTEEDKNIKWS

TRTRPLE – GFP Tag – V

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

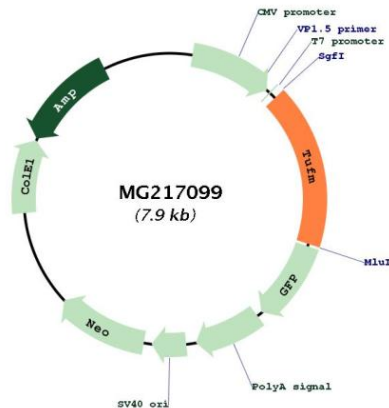
Locus ID: 233870

UniProt ID: [Q8BFR5](#)

Cytogenetics: 7 F3

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 MG217099