

Product datasheet for **RG204058**

TUFM (NM_003321) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TUFM (NM_003321) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TUFM
Synonyms:	COXPD4; EF-TuMT; EFTU; P43
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG204058 representing NM_003321
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**C

ATGACCACAATGGCGGCCGCCACCTGCTGCGCGCAGCGCCCACTTCAGCGGTCTCGCCGCCGCCGGA
 CCTTCCTGCTGCAGGGTCTGTTGCGGCTGCTGAAAGCCCCGGCATTGCCTCTCTTGTGCCGCGCCTGGC
 CGTGAGGCCAAGAAGACTTACGTGCGCGACAAGCCACATGTGAATGTGGGTACCATCGGCCATGTGGAC
 CACGGGAAGACCACGCTGACTGCAGCCATCACGAAGTTCTAGCTGAGGGAGGTGGGGCTAAGTTCAAGA
 AGTACGAGGAGATTGACAATGCCCGGAGGAGCGAGCTCGGGGTATCACCATCAATGCGGCTCATGTGGA
 GTATAGCACTGCCGCCGCCACTACGCCACACAGACTGCCCGGGTATGCAGATTATGTTAAGAATATG
 ATCACAGGCACTGCACCCCTCGACGGTGCATCCTGGTGTAGCAGCCAATGACGGCCCCATGCCCCAGA
 CCCGAGAGCACTTATTACTGGCCAGACAGATTGGGGTGGAGCATGTGGTGGTGTATGTGAACAAGGCTGA
 CGCTGTCCAGGACTCTGAGATGGTGAAGTGGTGAAGTGGAGATCCGGGAGCTGCTCACCGAGTTTGGC
 TATAAAGGGGAGGAGACCCAGTCATCGTAGGCTCTGCTCTCTGTGCCCTTGAGGGTCCGGACCCCTGAGT
 TAGGCCTGAAGTCTGTGAGAAGCTACTGGATGCTGTGGACACTTACATCCCAGTGCCCGCCCGGACCT
 GGAGAAGCCTTTCTGCTGCCTGTGGAGCGGTGTACTCCGTCCCTGGCCGTGGCACCCTGGTGACAGGT
 ACACTAGAGCGTGGCATTTTAAAGAAGGGAGACGAGTGTGAGCTCCTAGGACATAGCAAGAACATCCGCA
 CTGTGGTGACAGGCATTGAGATGTTCCACAAGAGCCTGGAGAGGGCCGAGGCCGAGATAACCTCGGGGC
 CCTGGTCCGAGGCTTGAAGCGGGAGGACTTGCGGCGGGGCTGGTCATGGTCAAGCCAGGTTCCATCAAG
 CCCACCAGAAGGTGGAGGCCAGGTTTACATCCTCAGCAAGGAGGAAGTGGCCGCCACAAGCCCTTGT
 TGTCCTCACTTCATGCCTGTCATGTTCTCCCTGACTTGGGACATGGCCTGTCGGATTATCCTGCCCCAGA
 GAAGGAGCTTGCCATGCCCGGGGAGACCTGAAGTTCAACCTAATCTTGCGGCAGCCAATGATCTTAGAG
 AAAGGCCAGCGTTTACCCTGCGAGATGGCAACCGGACTATTGGCACCGGTCTAGTCACCAACACGCTGG
 CCATGACTGAGGAGGAGAAGAATATCAAATGGGGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG204058 representing NM_003321
 Red=Cloning site Green=Tags(s)

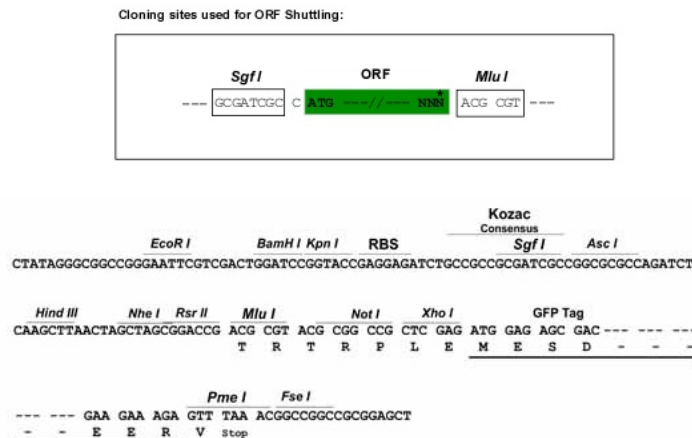
MTTMAAATLLRATPHFSGLAAGRTFLLQGLLRLLKAPALPLLCRGLAVEAKKTYVRDKPHVNVGTIGHVD
 HGKTTLTAAITKILAEGGGAKFKKYEEIDNAPEERARGITINAAHVEYSTAARHYAHTDCPHADYVKNM
 ITGTAPLDGCILVVAANDGPMPTREHLLARQIGVEHVVVYVKNADAVQDSEMVLEVEIRELLTEFG
 YKGEETPVIVGSALCALEGRDPELGLKSVQKLLDAVDTYIPVPARDLEKPFLLPVEAVSVPRGTVVTG
 TLERGILKKGDECELLGHSKNIRTVVVTGIEMFHKSLERAEGDNLGALVRGLKREDLRRGLVMVKPGSIK
 PHQKVEAQVYILSKEEGGRHKPFVSHFMPVMFSLTWDMACRIILPPEKELAMPGEDLKFNILRQPMILE
 KGQRFTLRDGNRTIGTGLVTNTLAMTEEEKNIKWG

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_003321

ORF Size: 1365 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_003321.5](#)

RefSeq Size: 2089 bp

RefSeq ORF: 1368 bp

Locus ID: 7284

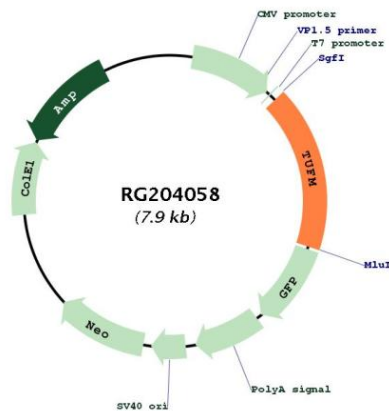
UniProt ID: [P49411](#)

Cytogenetics: 16p11.2

Domains: GTP_EFTU, GTP_EFTU_D3, GTP_EFTU_D2

Gene Summary: This gene encodes a protein which participates in protein translation in mitochondria. Mutations in this gene have been associated with combined oxidative phosphorylation deficiency resulting in lactic acidosis and fatal encephalopathy. A pseudogene has been identified on chromosome 17. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG204058