

## Product datasheet for **RG204221**

### **MTRF1L (NM\_019041) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MTRF1L (NM_019041) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MTRF1L
Synonyms:	HMRF1L; MRF1L; mtRF1a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204221 representing NM_019041 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGGTCCCGGTTCTGTGGGGCGCTGCCGGTGGCTCTGGCCCCGCCGGGCCGTTGGCCAGCCCGCC  
GGCCCCGAGCTCCGGTAGCCCGCCGCTGGAGGAGCTGTTGCCCCGGGGCGGGCCCTTGGCGACCTTCT  
CGAGCGCCAGGCGGGTCTGAAGCCATTTGAAGGTCAGGAGGCCGAGTTGCTGGCGGTGATCAAAGT  
CTGAACGAGAAGGAGCAGGAGCTGCGGGAGACTGAGCACTTGTGCACGATGAGAATGAAGATTTAAGGA  
AACTTGCAGAGAATGAAATCACTTTGTGTCAAAAAGAAATAACTCAGCTGAAGCATCAGATTATCTTACT  
TTTGTTCCCTCAGAAGAACAGATGAAAATGATTTGATCCTGGAAGTAAGTGCAGGAGTTGGAGGTCAG  
GAGGCAATGTTGTTTACATCAGAGATATTTGATATGTATCAGCAATATGCTGCATTTAAAAGATGGCATT  
TTGAAACCTGGAATATTTTCCAAGTGAAGTAGGTGGCCTTAGACATGCATCTGCCAGCATTGGGGGTTT  
AGAAGCCTATAGGCACATGAAATTTGAAGGAGGTGTTACAGAGTACAAAGAGTGCCAAAGACAGAAAAAG  
CAAGGCCGCGTCCATACTAGCACCATGACTGTAGCAATATTACCCAGCCTACTGAGATTAATCTGGTGA  
TTAATCCGAAAGATTTGAGAATTGACACTAAGCGAGCCAGTGGAGCTGGGGGCAGCATGTAATAACAC  
GGACAGTGTGTCCGGATAGTTTCATCTTCCAACAGGTGTTGTTTCTGAATGTCAACAAGAGAGATCTCAG  
CTGAAAAATAAAGAGCTGGCTATGACAAAGTTACGTGCAAACTGTACAGCATGCATCTAGAAGAAGAAA  
TAAATAAAGACAGAATGCTAGAAAAATTCAGATTGGAAGTAAAGGAAGATCAGAGAAAAATAAGAACATA  
TAATTTTCCACAGAACCAGGTCACAGATCACAGAATAAACAAGACGCTGCATGATCTTGAAACTTTTATG  
CAAGGAGATTACTACTGGATGAACTTGTACAGTCATTGAAGGAATACGCCGATTATGAATCTTTAGTAG  
AAATTATTTCCAAAAAGTT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >RG204221 representing NM\_019041  
 Red=Cloning site Green=Tags(s)

MRSRVLWGAARWLWPRRAVGPARRPLSSGSPLEELFARGGPLRTFLERQAGSEAHLKVRRPELLAVIKL  
 LNEKEQELRETEHLLHDENEDLRKLAENEITLCQKEITQLKHQIILLVPSEETDENDLILEVTAGVGGQ  
 EAMLFTSEIFDMYQQYAAFKRWHFETLEYFPELGGRLHASASIGGSEAYRHMKFEGGVHRVQRPKTEK  
 QGRVHTSTMTVAILPQPTTEINLVINPKDLRIDTKRASGAGGQHVNTTDSAVRIVHLPTGVVSECQERSQ  
 LKNKELAMTKLRKLYSMHLEEEINKRQARKIQIGSKGRSEKIRTYNFPQNRVTDHRINKTLHDLETFM  
 QGDYLLDELVQSLKEYADYESLVEIISQKV

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_019041

**ORF Size:** 1140 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\\_019041.4](#)

**RefSeq Size:** 2550 bp

**RefSeq ORF:** 1143 bp

**Locus ID:** 54516

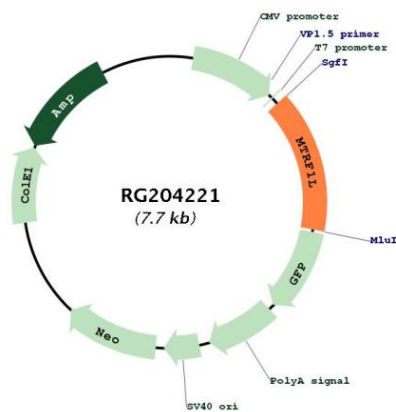
**UniProt ID:** [Q9UGC7](#)

**Cytogenetics:** 6q25.2

**Domains:** RF-1, PCRF

**Gene Summary:** The protein encoded by this gene plays a role in mitochondrial translation termination, and is thought to be a release factor that is involved in the dissociation of the complete protein from the final tRNA, the ribosome, and the cognate mRNA. This protein acts upon UAA and UAG stop codons, but has no in vitro activity against UGA, which encodes tryptophan in human mitochondrion, or, the mitochondrial non-cognate stop codons, AGA and AGG. This protein shares sequence similarity to bacterial release factors. Pseudogenes of this gene are found on chromosomes 4, 8, and 11. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2014]

### Product images:



Circular map for RG204221