

## Product datasheet for **RG206354**

### MTFR1 (NM\_014637) Human Tagged ORF Clone

#### Product data:

|                    |                         |
|--------------------|-------------------------|
| Product Type:      | Expression Plasmids     |
| Tag:               | TurboGFP                |
| Symbol:            | MTFR1                   |
| Synonyms:          | CHPPR; FAM54A2          |
| Mammalian Cell     | Neomycin                |
| Selection:         |                         |
| Vector:            | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL)  |

**ORF Nucleotide Sequence:** >RG206354 representing NM\_014637  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCTTGGCTGGATTAAGCGCCTAATTAGGATGGTTTTTCAACAAGTTGGAGTAAGCATGCAATCGGTAC  
TTTGGTCTAGGAAGCCATATGGTTCGTCCTCGAAGTATCGTAAGGAAATTTGGTACTAATTTGTCTCTGAT  
TCAGTGTCCAAGAGTTCAGTTTCAGATTAAACAGCCATGCAACAGAAATGGAGTCCAGCCACCCAGGAGAG  
GATGCAGTGGCGTCTTTTGTGCTGATGTTGGATGGTAGCCAAAGAAGAAGGAGAGTGTTCAGCAAGACTAA  
GGACAGAGGTCAGATCAAGGCCACCCCTTCAGGATGACCTTCTTTTCTTTGAGAAGGCCCAAGCAGACA  
GATTTCTTACCAGACTTGTCTCAAGAAGAGCCTCAGCTGAAGACCCAGCGCGGGCAATGAGGAAGCA  
CTGCAGAAGATTTGCGCTCTCGAAATGAACCTTGTCTCTCAGAGCTCAGATTGCCAAATTTGTGACCC  
AGCAGGAGCAGCAAAATCTCACTGCAGGTGACTTAGATTCTACCACATTTGGTACCATACCACCACACCC  
TCCACCTCCCCACCGCCCTGCCTCCCCCTGCACTGGGGCTCCACCAAGTACATCTGCTGTTGATCTG  
ATTAAGAAGCAAGAGAGAAAAAGAGCAATGCTGGAAGACTTTGGTTAAGAACAATCCAAGAAACCTG  
AAATGCCAAATATGCTAGAGATCCTTAAAGAGATGAACAGTGTAAACTTCGGTCAGTGAAGAGGTCAGA  
GCAAGATGTGAAGCCCAAGCCAGTGGATGCTACTGACCCTGCTGCCCTCATAGCAGAGGCTCTGAAAAAG  
AAATTTGCTTATCGGTATCGAAGTGATAGCCAAGATGAAGTTGAAAAAGGAATTCCAAAGTCTGAATCAG  
AGGCCACCTCAGAGAGAGTGTGTTTGGGCCACACATGTTGAAGCCAACAGGAAAAATGAAGGCTTTAAT  
TGAAAAATGTATCAGACTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



**Protein Sequence:** >RG206354 representing NM\_014637  
 Red=Cloning site Green=Tags(s)

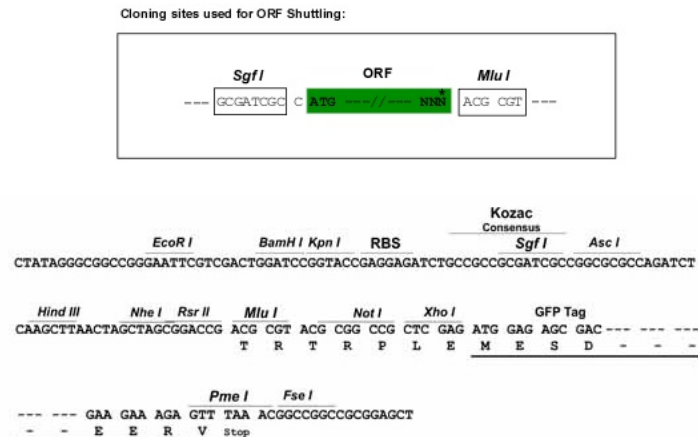
MLGWIKRLIRMVFQQVGVSMQSVLWSRKPYGSSRSIVRKIGTNLSLIQCPRVQFQINSHATEWSPSHPGEDAVASFADVGWVAKKEGEC SARLRTEVRSRPPLQDDLLFFEKAPSRQISLPDLSQEEPQLKTPARANEEALQKICALENELAAALRAQIAKIVTQQEQQLTAGDLNSTTFTGIPPHPPPPPPPLPPPALGLHQSTSAVDLIKERREKRANAGKTLVKNPNKKPEMPNMLEILKEMNSVKLSVKRSEQDVKPKPVDATDPAALIAEALKKKFAYRYRSDSQDEVEKGIPKSESEATSERVLFGPHMLKPTGKMKALIENVSDS

TRTRPLE - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja3088\\_f10.zip](https://cdn.origene.com/chromatograms/ja3088_f10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_014637

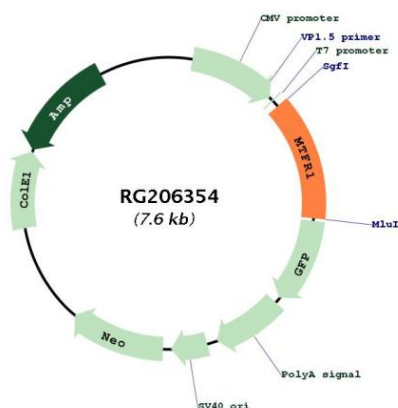
**ORF Size:** 999 bp

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OTI Disclaimer:</b>        | <p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p> |
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Components:</b>            | 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).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Note:</b>                  | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>RefSeq:</b>                | <a href="#">NM_014637.2</a> , <a href="#">NP_055452.2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>RefSeq Size:</b>           | 2691 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>RefSeq ORF:</b>            | 1002 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Locus ID:</b>              | 9650                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>UniProt ID:</b>            | <a href="#">Q15390</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Cytogenetics:</b>          | 8q13.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### Gene Summary:

This gene encodes a mitochondrial protein that is characterized by a poly-proline rich region. A chicken homolog of this protein promotes mitochondrial fission and the mouse homolog protects cells from oxidative stress. A related pseudogene of this gene is found on chromosome X. [provided by RefSeq, Mar 2009]

### Product images:



Circular map for RG206354