

Product datasheet for **RG206871**

MTG1 (NM_138384) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	MTG1
Synonyms:	GTP; GTPBP7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG206871 representing NM_138384
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGATTGACCCGCGCGCTGTGCAGCGCCGCCAGGCCGCTGGCGGGAGAACTCCCCCTGTGCG
GTCGCGACGTGGCGCGCTGGTTCCTGGGCCACATGGCCAAGGGGCTGAAGAAGATGCAGAGCAGCCTGAA
GCTGGTGGACTGTATCATCGAGGTCCACGATGCCCGGATCCCACTTTCAGGCCGCAACCTCTGTTTCAG
GAAACCCTTGGGCTTAAGCCTCACTTGTCTGCTCAACAAGATGGACTTGGCGGATCTTACAGAGCAGC
AGAAAATTATGCAACACTTAGAAGGAGAAGGCCCTAAAAAATGTCATTTTACCAACTGTGTAAGGATGA
AAATGTCAAGCAGATCATCCCGATGGTCACTGAACTGATTGGGAGAAGCCACCGCTACCACCGAAAAGAG
AACCTGGAGTACTGTATCATGGTCATTGGGGTCCCCAACGTGGGCAAGTCTCCCTCATCACTCCCTCC
GGAGGCAGCACCTCAGGAAAGGAAAGCCACCAGGGTGGGTGGCGAGCCTGGGATCACCAGAGCTGTGAT
GTCCAAAATTCAGGTCTCTGAGCGGCCCTGATGTTCTGTTGGAACTCCTGGCGTGTGGCTCCTCGG
ATTGAAAGTGTGGAGACAGGCCTGAAGCTGGCCCTGTGTGGAACGGTGTGGACCACCTGGTCGGGGAGG
AGACCATGGCTGACTACCTGCTGTACACCCTCAACAAACACCAGCGCTTGGGTACGTGCAGCACTACGG
CCTGGGCAGTGCTGTGACAACGTAGAGCGCTGCTGAAGAGTGTGGCTGTGAAGCTGGGAAGACGCAG
AAGGTGAAGGTGCTCACGGGCACGGGTAAAGTGAACGTTATTCAGCCTAACTATCCTGCGGCAGCCCGTG
ACTTCTGCAGACTTTCGCGCGTGGGTGCTGGGTTCCGTGATGCTGGACCTCGACGTCCTGCGGGGCCA
CCCCCGGCTGAGACTTGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG206871 representing NM_138384
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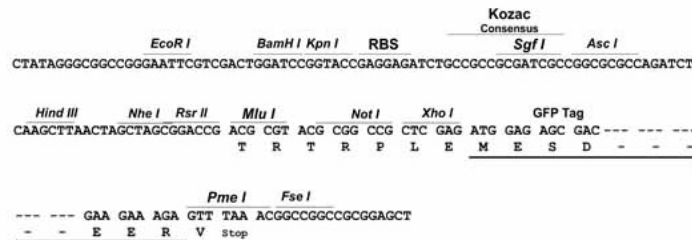
MRLTPRALCSAAQAAWRENFLPCGRDVARWFPGHMAKGLKKMQSSLKLVDICIEVHDARIPLSGRNPLFQ
ETLGLKPHLLVLNKMADLADLTEQQKIMQHLEGEGLKNVIFTNCVKDENVKQIIPMVTELIGRSHRYHRKE
NLEYCIMVIGVPNVGKSSLINSLRRQHLRKGKATRVGGEPGITRAVMSKIQVSRPLMFLDTPGVLAPR
IESVETGLKLALCGTVLDHLVGEETMADYLLYTLNKHQRFYVQHYGLGSACDNVERVLKSAVKLGKTQ
KYKVLGTGNVNIQPNYPAAARDFLQTFRRGLLGSMVLDLDVLRGHPPAETLP

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_138384

ORF Size: 1002 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_138384.2](#), [NP_612393.2](#)

RefSeq Size: 1614 bp

RefSeq ORF: 1005 bp

Locus ID: 92170

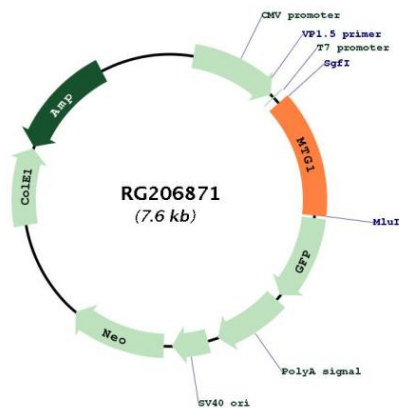
UniProt ID: [Q9BT17](#)

Cytogenetics: 10q26.3

Domains: MMR_HSR1

Gene Summary: Plays a role in the regulation of the mitochondrial ribosome assembly and of translational activity. Displays mitochondrial GTPase activity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG206871