

## Product datasheet for **RG207943**

### MT (MCAT) (NM\_173467) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MT (MCAT) (NM_173467) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MT
Synonyms:	fabD; FASN2C; MCT; MCT1; MT; NET62
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207943 representing NM_173467 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCGTCCGGGTGCGACGGGTAGCGTGGGTGAGGGCTTGGGCGCCAGCTACCGCCGGCGCCTCGA  
GCTTCCCGGTGCCTCCGCGGGCGCCAGGGTGTAGCGGAGCTGCTGCGAGATGCGACCGGGCGGAGGA  
GGAGGCGCCCTGGGCGGCGACGGAGCGGCAATGCCGGCCAGTGTCTCGTGTCTCTTCCCGGGCCAG  
GGCAGCCAGGTGGTGGGCATGGCCGCGGTCTGCTCAACTACCGCGCGTCCGCGAACTCTACGCCGCC  
CCCGCCGCGTGTGGGCTACGACCTGCTGGAAGTGTGAGCCTGCACGGGCCGAGGAGACCTGGACCGCAC  
CGTGCAGTGTGAGCCCGGATCTTCGTGGCATCGCTGGCCGCTGTGAGAACTACATCACCTGCAGCCC  
TCGGTGATTGAGAACTGTGTTGCTGCTGCTGGATTGAGTGTGGGAGAGTTTGCAGCCCTAGTGTGGCC  
GAGCCATGGAATTTGCTGAAGTTTGTATGCAAGTAAAATCCGAGCTGAGGCCATGCAGGAAGCTTCAGA  
AGCTGTCCCGAGTGGGATGCTGTCTGCTCGGCCAGCCTCAGTCCAAGTTCAACTTCGCTGTTTGGAA  
GCCCGGGAACACTGCAAGTCTTTAGGCATAGAGAAACCCGATGTGAAGTGTCCAACCTCTTTCCAG  
ATTGCAGGGTGAATTCAGGACACCAAGAGGCTCTACGGTTTCTCCAGAAGAATTCCTCTAAGTTTCAAT  
CAGACGCCACAGGATGTTGCCGTTAGTGGCGCATTCCACACCCGCTCATGGAGCCAGCCGTGGAGCCC  
CTGACGCAAGCTTTAAAGGCAGTGCACATTAAGAAGCCTCTGGTTTCTGTCTCAACCTCCACGGGC  
ATAGATACAGGCATCCCGGGCACATCCACAAGCTGCTGGCCAGCAGTGGTCTCCCGAGTGAAGTGGGA  
GCAGACGATGCATGCCATATACGAAAGGAAAAAGGCGAGGGGTTCCCCCAAACCTTTCGAAGTAGCCCT  
GGCAGGCAGTGGGAGCCATCCTGAAGAGCTGTAACATGCAGGCCTGGAAGTCTACAGCGCCGTGGATG  
TGCTGCAGACCCTCGAACATGTGGACCTGGACCCTCAGGAGCCCCGAGA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >RG207943 representing NM\_173467  
 Red=Cloning site Green=Tags(s)

```
MSVRVARVAWRGLGASYRRGASSFPVPPPGAQGVAE LLRDATGAE EEPWAATERRMPGQCSVLLFPGQ
GSQVVGMGRGLLNYPVREL YAAARRVLGYDLLE LSLHGPQETLDR TVHCQPAIFVASLA AVEKLHHLQP
SVIENCVAAGFSVGEFAAL VFAGAMEFAEGL YAVKIRAEAMQEASEAVPSGMLSVLGQPQSKFNFACLE
AREHCKSLGIENPVCEVSNY LFPDCRVI SGHQEALRFLQKNSSKFHFRRT RMLPVSGAFHTRLMEPAVEP
LTQALKAVDIKKPLVSVYSNVHGHRYRHPGHIHKLLAQQLVSPVKWEQTMHAIYERKKGRGFPQTFEVGP
GRQLGAILKSCNMQAWKSYS AVDVLQTL EHVLDLPQEPPR
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_173467

**ORF Size:** 1170 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\\_173467.4](#), [NP\\_775738.3](#)

**RefSeq Size:** 2086 bp

**RefSeq ORF:** 1173 bp

**Locus ID:** 27349

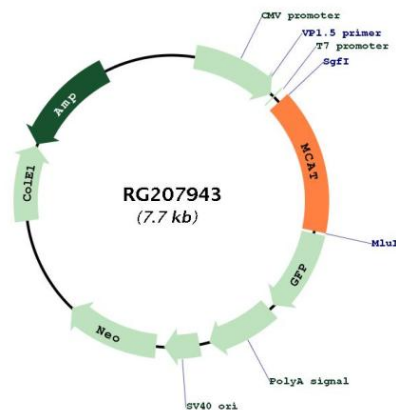
**UniProt ID:** [Q8IVS2](#)

**Cytogenetics:** 22q13.2

**Protein Pathways:** Fatty acid biosynthesis, Metabolic pathways

**Gene Summary:** The protein encoded by this gene is found exclusively in the mitochondrion, where it catalyzes the transfer of a malonyl group from malonyl-CoA to the mitochondrial acyl carrier protein. The encoded protein may be part of a fatty acid synthase complex that is more like the type II prokaryotic and plastid complexes rather than the type I human cytosolic complex. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2012]

### Product images:



Circular map for RG207943