

Product datasheet for **RG234305**

TOP1MT (NM_001258446) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TOP1MT (NM_001258446) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TOP1MT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG234305 representing NM_001258446
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTTAGATCATGAATACACAACAAAGGAGTTTTCCGGAAGAACTTCTCAATGACTGGCGAAAGGAAA
 TGGCGGTGGAAGAGAGGGAAGTCATCAAGAGCCTGGACAAGTGTACTTCACGGAGATCCACAGATACTT
 TGTGGACAAGGCCGAGCCCGAAAGTCCTGAGCAGGGAGGAGAAGCAGAAGCTAAAAAGAAGAGGCAGAA
 AAACCTCAGCAAGAGTTCGGCTACTGTATTTAGATGGTCACCAAGAAAAATAGGCAACTTCAAGATTG
 AGCCGCTGGCTTGTCCGTGGCCGTGGCGACCATCCAAGATGGGGATGCTGAAGAGAAGGATCACGCC
 AGAGGATGTGGTTATCAACTGCAGCAGGGACTCGAAGATCCCCGAGCCGCGGGGGCACCAGTGGAAAG
 GAGGTGCGCTCCGATAACACCGTCACGTGGCTGGCAGCTTGGACCGAGAGCGTTCAGAACTCCATCAAGT
 ACATCATGCTGAACCCTTGCTCGAAGCTGAAGGGGAGACAGCTTGGCAGAAGTTTAAACAGCTCGACG
 CCTGCGGGGATTTGTGGACGAGATCCGCTCCCAGTACCGGGCTGACTGGAAGTCTCGGGAATGAAGACG
 AGACAGCGGGCGGTGGCCCTGTATTTATCGATAAGCTGGCACTGAGAGCAGGAAATGAGAAGGAGGACG
 GTGAGGCGGCCGACACCGTGGGCTGCTGTTCCCTCCGCGTGGAGCACGTCCAGCTGCACCCGGAGGCCGA
 TGGCTGCCAACACGTGGTGAATTTGACTTCTGGGGAAGGACTGCATCCGCTACTACAACAGAGTGCCG
 GTGGAGAAGCCGGTGTACAAGAATTACAGCTCTTTATGGAGAACAAGGACCCCGGGACGACCTTTCCG
 ACAGGCTGACCACGACCAGCCTGAACAAGCACCTCCAGGAGCTGATGGACGGGCTGACGGCCAAGGTGTT
 CCGGACCTACAACGCCTCCATCACTCTGCAGGAGCAGCTGCGGGCCCTGACGCGCGCCGAGGACAGCATA
 GCAGCTAAGATCTTATCTACAACCGAGCAACCGAGTCTCCAGACGAAGATCCAGGCAAAAGAAGGAGCAGGTGGC
 CCCCAGTACGTTTCGAGAAGTCGATGCAGAATCTCCAGACGAAGATCCAGGCAAAAGAAGGAGCAGGTGGC
 TGAGGCCAGGGCAGAGCTGAGGAGGGCGAGGGCTGAGCACAAAGCCCAAGGGGATGGCAAGTCCAGGAGT
 GTCTGGAGAAGAAGAGGCGGCTCCTGGAGAAGCTGCAGGAGCAGCTGGCGCAGCTGAGTGTGCAGGCCA
 CGGACAAGGAGGAGAACAAGCAGGTGGCCCTGGGCACGTCCAAGCTCAACTACCTGGACCCAGGATCAG
 CATTGCCTGGTGAAGCGGTTCCAGGTGCCAGTGGAGAAGATCTACAGCAAAACACAGCGGGAGAGGTTC
 GCCTGGGCTCTCGCCATGGCAGGAGAAGACTTTGAATTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG234305 representing NM_001258446
 Red=Cloning site Green=Tags(s)

MLDHEYTTKEVFRKNFFNDWRKEMAVEEREVIKSLDKCDFTEIHRYFVDKAAARKVL SREEKQKLKEEAE
 KLQQEFGYICILDGHQEKIGNFKIEPPGLFRGRGDHPKMGMLKRRITPEDVVINCSRDSKIEPPAGHQWK
 EVRSDNTVTWLAAWTESVQNSIKYIMLNPCSKLKGETAWQKFETARRLRGFVDEIRSQYRADWKSREMKT
 RQRAVALYFIDKLALRAGNEKEDGEAADTVGCCSLRVEHVQLHPEADGCQHVVDFDLGKDCIRYNNRVP
 VEKPVYKNLQLFMENKPRDDLFDRLTTTSLNKHLQELMDGLTAKVFRTYNASITLQEQLRALTRAEDSI
 AAKILSYNRRANRVVAILCNHQRATPSTFEKSMQNLQTKIQAKKEQVAEARAELRRARAETHKAQGDGKSRS
 VLEKRRLLLEKLQEQLAQLSVQATDKEENKQVALGTSKLNLYLDPRIISIAWCKRFRVPVEKIYSKTQREFR
 AWALAMAGEDFEF

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001258446

ORF Size: 1509 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_001258446.1](#), [NP_001245375.1](#)

RefSeq Size: 2045 bp

RefSeq ORF: 1512 bp

Locus ID: 116447

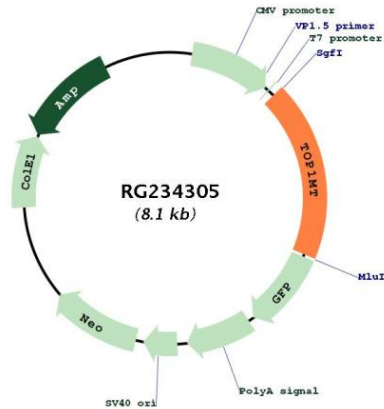
UniProt ID: [Q969P6](#)

Cytogenetics: 8q24.3

Protein Families: Druggable Genome

Gene Summary: This gene encodes a mitochondrial DNA topoisomerase that plays a role in the modification of DNA topology. The encoded protein is a type IB topoisomerase and catalyzes the transient breaking and rejoining of DNA to relieve tension and DNA supercoiling generated in the mitochondrial genome during replication and transcription. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, May 2012]

Product images:



Circular map for RG234305