

Product datasheet for **SC115519**

MTO1 (NM_012123) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTO1 (NM_012123) Human Untagged Clone
Tag:	Tag Free
Symbol:	MTO1
Synonyms:	CGI-02; COXPD10
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC115519 sequence for NM_012123 edited (data generated by NextGen Sequencing)

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ATGTTCTACTTCCGAGGCTGTGGCCGTTGGGTGCGGTTTCCTTCACCAAGCAGCAATTT
CCGTTGGCACGGTTGAGCAGTGACAGCGCGGCCCGGACTCCGCACTTCGACGTGATA
GTCATTGGTGGAGGACATGCCGGGACTGAGGCAGCCACCGCCCGCTCGGTGCGGCTCT
CGGACTCTGCTCCTCACTCACCGGTGGACAGATCGGTCAGATGTCATGTAATCCTTCC
TTTGGTGGCATCGGAAAGGGACATTTAATGAGGGAAGTAGATGCCTTGGATGGCCTGTGT
TCTCGCATCTGTGACCAGTCTGGTGTACATTATAAAGTATTAAACCGGCGTAAGGGACCA
GCTGTGTGGGCTGTGAGAGCTCAGATTGATAGGAACTCTATAAACAGAACATGCAGAAA
GAAATCTTGAATACACCACTGCTTACTGTTGAGGAGGAGCTGTAGAAGATCTTATTCTT
ACAGAACCAGAGCCTGAACACACTGGGAAATGCCGTGTCAGTGGGGTTGTTTTGGTGGAT
GGAAGCACAGTATATGCAGAGAGTGTGATTCTGACTACTGGGACATTTCTGAGAGGCATG
ATTGTAATTGGATTGGAGACGCATCCAGCAGGACGTTTAGGGGATCAGCCTTCTATAGGA
TTGGCTCAGACACTGGAGAAGTTAGGGTTTGTGGTGGGAAGTTGAAGACTGGGACTCCA
CCCCGAATTGCCAAAGAGTCCATTAATTTTCAGTATTCTAAACAAGCATATACCGACAAT
CCATCCATACCATTACAGCTTTACCAATGAGACAGTATGGATTAAGCCAGAAGATCAGCTG
CCATGTTACTTGACTCACACCAACCCTAGAGTGGATGAGATTGTCCTTAAGAACCTTCAC
CTTAATAGTCATGTTAAAGAAACGACAAGAGGACCTCGATACTGTCCCTCCATTGAATCA
AAAGTTTTGCGTTTTCCAAACCGTCTACATCAGGTTTGGTTGGAACCTGAAGGAATGGAT
TCTGACCTTATCTACCCACAGGGGTTATCTATGACGCTACCAGCTGAGTTACAAGAGAAA
ATGATCACATGCATCAGAGGCTTGGAGAAAGCTAAAGTGATTGAGCCAGGCTACGGTGTT
CAGTATGATTACTTAGATCCCCGTGAGTACCCCTTCTTGGAGACTCATTGGTTCAA
CGACTCTTCTTTGCTGGACAGATCAATGGCACCCTGGTTATGAGGAAGCTGCAGCTCAA
GGTGTGATAGCCGAATCAACGCCAGTCTTCGGGTGAGTCGCAAGCCTCCCTTTGTGGTT
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GCTGACAGCCGGCTCACACTGCGAGGGTATAAAGACGCTGGCTGTGTGTCCCAACAACGA
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TTAGCCAAGGCTGTTCCAGAGCCCTTGAAGAAGTATACTAAATGTAGAGAGCTGGCTGAA
AGACTGAAAAATAGAAGCCACTTATGAATCAGTGTGTTCCATCAACTACAAGAAATAAAG
GGAGTTGAGCAAGATGAAGCTCTCCAAGTGCAAAAGACCTAGATTATTTGACTATCAGG
GATGTGTCTTTGTCCCATGAAGTTCGAGAGAACTACATTTTAGTCGTCCACAGACGATC
GGGGCTGCTAGTCGCATACCCGGAGTAACACCTGCCGCCATCAATCTGCTGAGATTT
GTGAAGACCACTCAACGAAGACAGTCGGCTATGAATGAATCATCAAGACTGATCAATAC
TTATGTGATGCAGACAGACTTCAAGAGAGAGAGTTATAG
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Clone variation with respect to NM_012123.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_012123 unedited
TGCAGAAATTTGTAAACGAACACTACTATAGGGCGGCCGGAATCGGCACGAGGTAAATA
AATAAATAAATAAAAAATAAATAAATAAATAAAGCCCGCACGAACCTAGGAAAG
AAAATACACAACCGGCCCTCCGTGCGATCACCCATCTCCCTCACCAGGAAAGTAGCTCCA
AACCGCAATCAGCGGCGACGCTGGACGTAGACGTCTACCCCGTGATATTAAAGCAAGA
TGGCCGCGCCCTGCAGATTGTCTCTTGTGCGTAAGTTTTTTGACCGTCACTCGTGTC
GCTTCAAAGTCAGATAGATTTTTCTCCAGCATGTTCTACTTCCGAGGCTGTGGCCGTTG
GGTCGCGGTTTCTTCCACCAAGCAGCAATTTCCGTTGGCACGGTTGAGCAGTGACAGCGC
GGCGCCCGGACTCCGCACTTCGACGTGATAGTCATTGGTGGAGGACATGCCGGGACTGA
GGCAGCCACCGCCGCGCTCGGTGCGGCTCTCGGACTCTGCTCCTCACTACCGCGTGGA
CACGATCGGTGAGATGTCATGTAATCCTTCTTTGGTGGCATCGAAAGGGACATTTAAT
GAGGGAAGTAGATGCCTTGGATGGCCTGTGTTCTCGCATCTGTGACCACTCTGGTGACA
TTATAAGTATTAACCGCGTAAGGGACAGCTGTGTGGNGTCTGAGAGCTCAGATTGA
TAGGAACTCTATAACAGAACATGCAGAAAGAAATCTTGAATACCACTGCTTACTGT
TCAGGAGGAGCTGTAGAAGATCTTATTCTTACAGAACAGAGCCTGACACACTGNGAAA
TGCCGTGTCACTGGGTTGGNTTGGTGGATGGAACACAGTTATGCAGAGAGTGTGATTCT
GACTACTGGACTTTCTGAGAGGCATGATGTAATGGATGNAGACCATN

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_012123 unedited
GCAATCTAGAATCGAGTTTTTTTTTTTTTTTTTTGAGTAGGCAATCTGCATGTTGAGTT
TTATTCCAGGTTCAAGTTTTAGGTTCACTGTCTCTCTTTGATGAACACTGCACAAAGTT
ATTTGTATTACAGCTCCTTAAAGAAAGAGTACAAATTGTTTACGACTAGTTTTTTCATAT
ACACGAAAAAGCACAATTATAATTTCTGTCCCACTCAGAAATTAATGGCAAACCCATAGT
AACCTAATAAAGCTATTTTAACATGTGCTAAATAATTCTTTATCTATACTGTTGTATTG
ATCAAAATTATTTATAGCTCTTTAAAAATCTTTTATGAATTGAAAGCTATAACTCTCTCT
CTTGAAGTCTGTCTGCATCACATAAGTATTGATCAGTCTTGGATGATTTCATTCATAGCCG
ACTGTCTTCGTTGAGTGGTCTTCACAAATCTCAGCAGATTGATGATGGCGGCAGGTGTTA
CTCCGGGTATGCGACTAGCAGCCCCGATCGTCTGTGGACGACTAAATGTAGCTTCTCTC
GAATTCATGGGACACAGACACATCCCTGATAGTCAAATAATCTAGGTCTTTTGGCAGTT
GGAGAGTCCATCTTGTGAATCCCTTTATTTTTGTAGCTGATGGAACCACTGATT
CATAAGTGGCCTCTATTTTCAGTCTTTCAGCCAGCTCTCTACTTTAATATACTTCTTTCA
GGGCTCTTGCACCGCCCTTGCCTAACGAATCCATGCCAATTTTCTATACTTCACAAAT
TGAGAGCCCTGCCGGCCAGACTTTTACTATTCTCTAGAACCTTTTGGGACCACACCTT
TCCCTTTAGACCCTCAAACTCCCTCAATCTCACACACAAACGCGCTTCTTCTACAC
ATAACCTCTCAACCAGCCTTTCTTTCTCGCGGTTGGGCACACAGCCGGGTCTTATT
ACCCTTCGCGGTGGACCGCGTGCACCTTCTCCGGTCTGGCCACACGCGACTCACG
CGCGTGTACCGCGCG

Restriction Sites:

ECoRI-NOT

ACCN:

NM_012123

Insert Size:

2500 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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:	<u>NM_012123.2, NP_036255.2</u>
RefSeq Size:	2537 bp
RefSeq ORF:	2079 bp
Locus ID:	25821
UniProt ID:	<u>Q9Y2Z2</u>
Cytogenetics:	6q13
Domains:	GIDA
Protein Families:	Druggable Genome
Gene Summary:	This gene encodes a mitochondrial protein thought to be involved in mitochondrial tRNA modification. The encoded protein may also play a role in the expression of the non-syndromic and aminoglycoside-induced deafness phenotypes associated with a specific mutation in the mitochondrial 12S rRNA gene. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (1) encodes the predominant isoform (a).