OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC226122

MTO1 (NM_001123226) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTO1 (NM_001123226) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MTO1
Synonyms:	CGI-02; COXPD10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC226122 representing NM_001123226
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTCTACTTCCGAGGCTGTGGCCGTTGGGTCGCGGTTTCCTTCACCAAGCAGCAATTTCCGTTGGCAC
GGTTGAGCAGTGACAGCGCGGCGCCCCGGACTCCGCACTTCGACGTGATAGTCATTGGTGGAGGACATGC
CGGGACTGAGGCAGCCACCGCCGCCGCTCGGTGCGGCTCTCGGACTCTGCTCCTCACTCACCGCGTGGAC
ACGATCGGTCAGATGTCATGTAATCCTTCCTTTGGTGGCATCGGAAAGGGACATTTAATGAGGGAAGTAG
ATGCCTTGGATGGCCTGTGTTCTCGCATCTGTGACCAGTCTGGTGTACATTATAAAGTATTAAACCGGCG
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GAAATCTTGAATACACCACTGCTTACTGTTCAGGAGGGAGCTGTAGAAGATCTTATTCTTACAGAACCAG
AGCCTGAACACACTGGGAAATGCCGTGTCAGTGGGGTTGTTTTGGTGGATGGAAGCACAGTATATGCAGA
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GGACGTTTAGGGGATCAGCCTTCTATAGGATTGGCTCAGACACTGGAGAAGTTAGGGTTTGTGGTGGGAA
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ACCGGACAATCCATCCATACCATTCAGCTTTACCAATGAGACAGTATGGATTAAGCCAGAAGATCAGCTG
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TAGATTATTTGACTATCAGGGATGTGTCTTTGTCCCATGAAGTTCGAGAGAAACTACATTTTAGTCGTCC
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GTGAAGACCACTCAACGAAGACAGTCGGCTATGAATGAATCATCCAAGACTGATCAATACTTATGTGATG
CAGACAGACTTCAAGAGAGAGAGTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC226122 representing NM_001123226
Red=Cloning site Green=Tags(s)

MFYFRGCGRWVAVSFTKQQFPLARLSSDSAAPRTPHFDVIVIGGGHAGTEAATAAARCGSRTLLLTHRVD
TIGQMSCNPSFGGIGKGHLMREVDALDGLCSRICDQSGVHYKVLNRRKGPAVWGLRAQIDRKLYKQNMQK
EILNTPLLTVQEGAVEDLILTEPEPEHTGKCRVSGVVLVDGSTVYAESVILTTGTFLRGMIVIGLETHPA
GRLGDQPSIGLAQTLEKLGFVVGRLKTGTPPRIAKESINFSILNKHIPDNPSIPFSFTNETVWIKPEDQL
PCYLTHTNPRVDEIVLKNLHLNSHVKETTRGPRYCPSIESKVLRFPNRLHQVWLEPEGMDSDLIYPQGLS
MTLPAELQEKMITCIRGLEKAKVIQPGYGVQYDYLDPRQITPSLETHLVQRLFFAGQINGTTGYEEAAAQ
TECCSVARLECSDMISQLQAILLPQPSLVAGTAGMHHNTQGVIAGINASLRVSRKPPFVVSRTEGYIGVL
IDDLTTLGTSEPYRMFTSRVEFRLSLRPDNADSRLTLRGYKDAGCVSQQRYERACWMKSSLEEGISVLKS
IEFLSSKWKKLIPEASISTSRSLPVRALDVLKYEEVDMDSLAKAVPEPLKKYTKCRELAERLKIEATYES
VLFHQLQEIKGVQQDEALQLPKDLDYLTIRDVSLSHEVREKLHFSRPQTIGAASRIPGVTPAAIINLLRF
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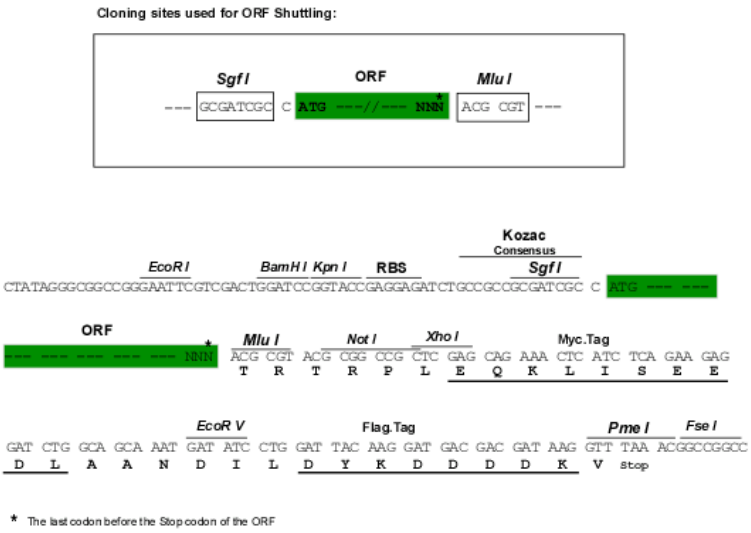
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001123226

ORF Size: 2196 bp

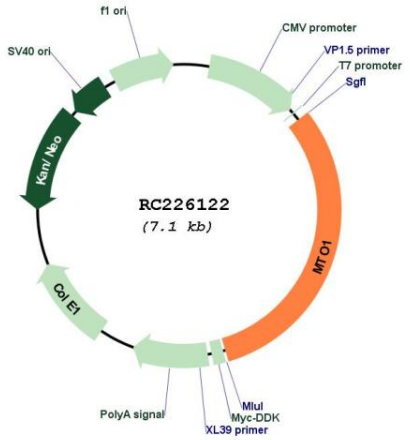
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_001123226.2
RefSeq ORF:	2199 bp
Locus ID:	25821
UniProt ID:	Q9Y2Z2
Cytogenetics:	6q13
Protein Families:	Druggable Genome
MW:	81.4 kDa
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]

Product images:



Circular map for RC226122