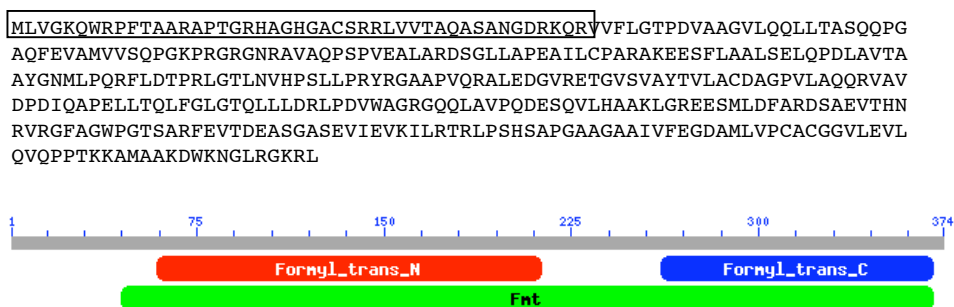


## **Supporting information**

Supplemental Figure S1	1
Supplemental Table S1	2



**Supporting information: Figure S1.**

Aminoacid sequence of the predicted *Chlamydomonas* mitochondrial methionyl-tRNA<sup>Met</sup> formyltransferase (jgilChlre3183209lestExt\_GenewiseW\_1.C\_870007). The predicted mitochondrial targeting sequence is surrounded. The two predicted formyl-transferase domains (<http://www.ncbi.nlm.nih.gov:80/>) are given.

Supporting information: Table S1.

Target RNAs	Probes	sequences
Trp CCA mt	Wm	AGAGGTGTAGCTTAGTTGGTTAAAGCGCAAGAT <b>TCCA</b> AACTTTGAAA <b>T</b> CGAGGGTTCGAGTCCCTTCATCTCTG
Met CAU mt	Mm	AGACACGTAGCTTAGTGGTAAAGCA <b>ACTGGTCTCAT</b> AAGCCAGCTATCGCAAGTTCGAATCTCGCCGTGTCTA
Gln TTG mt	Qm	TGGGGCATAGCCAAGTGGTAAAGCA <b>ATTGGACTTTG</b> ACTCCAAGATGCATGGGTTCGAATCCTATTCGCCCCAG
Ala1 AGC	A1	GGGGTCGTAGCTCAAA <b>TGGTAGAGC</b> GCCCGCT <b>TAG</b> CATGCGGGAGGTAGGGGG <b>ATCGATGCCCTCCG</b> ACTCCA
Ala1 CGC	A1	GGGGTCGTAGCTCAAA <b>TGGTAGAGC</b> GCCCGCT <b>TGC</b> CATGCGGGAGGTAGGGGG <b>ATCGATGCCCTCCG</b> ACTCCA
Ala1 TGC	A1	GGGGTCGTAGCTCAAA <b>TGGTAGAGC</b> GCCCGCT <b>TGC</b> CATGCGGGAGGTAGGGGG <b>ATCGAAGCCCTCCG</b> ATTCCA
Ala2 CGC	A2	GGGCTTTTAGCTCAGTGGT <b>TAGAGCGCGCGCTT</b> CGCATGCGTGAGGTACCCG <b>ATCGATCCCGT</b> AAGTCCA
Ala2 TGC	A2	GGGCTTTTAGCTCAGTGGT <b>TAGAGCGCGCGCTT</b> CGCATGCGTGAGGT <b>CAT</b> CGGTT <b>CGA</b> ACCCGATATGGTCCA
Arg CCG	R1	GGCCGAGTGGCTAA <b>TGGAt</b> AAGCGTCA <b>CCCT</b> CGAAGGTGAAGATT <b>GCGGGTTCGAGTCCCGCTTGGT</b> CG
Arg ACG	R2	GCTTCTATAGCTCAGT <b>AGGTAGAGCGTGC</b> GGCT <b>TTA</b> ACC <b>GCAAGGt</b> CGACGGTTCGATCCCGT <b>TGG</b> AAGCG
Arg CCT	R3	GGCCTTGTAGCTCAGTGGT <b>TAGAGCATGACTTT</b> CCTAAGGT <b>CGGGT</b> CGCAGGT <b>TCGATCCCTGCCTAGG</b> TCCG
Arg TCG	R4	GGCCGCGTGGCCAA <b>TGGATAGCG</b> CAC <b>TGGACTT</b> CGAATCCAGGGG <b>TGCAGGTT</b> CGAGCC <b>CTGCCTGGT</b> CG
Arg TCT	R5	GACCCTGTAGCTCAGTGGT <b>TAGAGCGAA</b> TGC <b>CTTCTA</b> AGCAT <b>TAGG</b> TCGAGGGTTCGACCCCCCTTGGG <b>TCG</b>
Asp GTC	D	<b>GTCGTCATCGTATAGTGGT</b> TAGTATCCCGC <b>CTGTC</b> ACGCGGGAGGCCGGG <b>TT</b> CGATTC <b>CCCGT</b> GACGGCG
Asn GTT	N	GCTTCTATAGCTCAGT <b>AGGTAGAGCGTGC</b> GGCT <b>TTA</b> ACC <b>GCAAGGt</b> CGACGGTTCGATCCCGT <b>TGG</b> AAGCG
Cys GCA	C	GGGTCTTAGCTCAGTGGT <b>TAGAGCAGCTGAC</b> TGCAGATCAGCAGG <b>tCT</b> CGAGTTCGATCC <b>TCGAGGG</b> CCCT
Gln TTG	Q1	GGT <b>CGTATGGTGTAGCGGTGATC</b> ACTCTGGACT <b>TTGA</b> ATCCAGCAACACGGG <b>TTCGAATCCCGT</b> TACGACCT
Gln CTG	Q2	GGT <b>CCTGTGGTCTAGTGGT</b> tAGGACAGCAGACT <b>CTGA</b> ATCTGCTAACCTGAG <b>TTCAAGT</b> CTCAGCAGGACCT
Glu TTC	E1	<b>CTCCTCGTAGTCTAGGCGGTc</b> AGGATAC <b>GTGGCTTTC</b> ACCACGCGACCCGGG <b>TT</b> CGAGTCCCGGCAGGAGG
Glu CTC	E2	TTCGCTATAGCTTAGCGGT <b>TCAGGATAC</b> AGGAT <b>CTC</b> ACTCCTGAGACCCGGG <b>TT</b> CGAGTCCCGGTAGCGAAA
Gly GCC	G1	GCAC <b>TAGTGGTATAGTGGTAGCATAGG</b> TC <b>CTT</b> GCCACGGA <b>CCAG</b> ACCCGAG <b>TT</b> CGAT <b>TCTCGG</b> CTAGTCA
Gly TCC	G2	C <b>CGCTACTAGTCCAGTGGT</b> TAGGATAT <b>TTG</b> CC <b>TCC</b> AAGCAAAAGAGCCGGG <b>TT</b> CGATTC <b>CCCGGT</b> TAGGGCA
Gly CCC	G3	C <b>CGCTAGTGGTGTAGTAGCAGC</b> ATT <b>TACGCCTCCC</b> ACGCGTAA <b>AGACT</b> CGGGT <b>GCA</b> AATCCCGGTAGCGCA
His GTG	H	<b>GTCCCTATCGTATAGTGGT</b> TAGTACATCACG <b>TTGT</b> GGCCGTGAAGACCCCGG <b>CTCAA</b> ACCCGGT <b>TAGG</b> GACA
Ile AAT	I1	<b>GGCCTGT</b> TAGCTCAGTGGT <b>TAGAGCGTGGT</b> GCT <b>AA</b> TAACGCCAAG <b>GCAT</b> CGGTTCGATCCCG <b>GATACGG</b> GCCA
Ile TAT	I2	<b>GCTCCTGTA</b> ACTCAGTGGT <b>TAGAGATAGAG</b> TATGGG <b>CTTAT</b> GAGCCAGAG <b>tCCG</b> GGG <b>TT</b> CGAGCCCGCAGGGACA
Leu CAG	L1	GGCGAGGTGGCCAGCGG <b>CTTA</b> AGCGCTAG <b>TTT</b> CAGG <b>TACT</b> AGTCCGAAAGGGCGT <b>GAGT</b> TCAAATCTCAC <b>CCCT</b> CGTCA
Leu CAA	L2	<b>GATCTCGT</b> GCCGAGTGGT <b>CT</b> AACGGTGGG <b>CTCA</b> AGTTC <b>CCAT</b> GT <b>TG</b> CAAAACCGGTGGG <b>TT</b> CGA <b>ACCC</b> ACCAGG <b>GTCA</b>
Leu TAA	L3	C <b>CGGAA</b> TGCCCGAGTGGT <b>CCA</b> AGGGGGG <b>TGA</b> CT <b>TA</b> AGAT <b>CTC</b> CTAG <b>TCG</b> TAA <b>AGACT</b> CGGTGGG <b>TTCAA</b> ACCC <b>ACTT</b> CCCGCA
Leu TAG	L4	GGCGAAGTGGCCGAGTGGT <b>CTA</b> AGCGCAGGAT <b>TAG</b> GC <b>TCT</b> CG <b>GAAAGGGCGCAGG</b> TT <b>CAA</b> ACCC <b>TGC</b> CTTCG <b>TCA</b>
Leu AAG	L5	GGCGATGTGGCCGAGTGGT <b>CTA</b> AGCGCAGGAT <b>TAGGCTCCTGT</b> CCGCAAGGGCGT <b>AGGTT</b> CGA <b>ACCC</b> TACCATCG <b>TCA</b>
Lys CTT	K1	GCCCGGTAGCTCAGT <b>CGGTAGAGCGCAAGGCT</b> CT <b>TA</b> ACCT <b>TGT</b> GGt <b>CGTGGGTT</b> CGAGCC <b>ACAT</b> CCCG <b>GTCA</b>
Lys TTT	K2	GCCCGCTTAGCTCAGTGGT <b>TAGAGCGCGAGGCTTTT</b> AACTCGTGG <b>c</b> CGTGGG <b>TT</b> CGATCC <b>CCAC</b> AGCGGGCG
Meti CAT	Mi	ATCGAGATGGCGCAGCGGAAGCG <b>GTGC</b> GGGG <b>CTCA</b> TAA <b>CCCG</b> GAG <b>tCC</b> AGGATCGAA <b>ACCT</b> GT <b>CT</b> CGATA
Mete CAT	Me	<b>CCGGATGTGGCCAGCTGGT</b> tAGCGCGTAGG <b>TCATA</b> A <b>TCC</b> TAA <b>GGt</b> CA <b>T</b> AG <b>TT</b> CGA <b>ACCT</b> CAT <b>CT</b> CC <b>GCA</b>
Phe GAA	F	CGGGAATAGCTCAGTGGGAGAGCG <b>TTAGACTGA</b> AGAT <b>CTA</b> AAGG <b>tCG</b> TAGTTCGATC <b>CTGG</b> CAT <b>TT</b> TC <b>GCA</b>
SeC TCA	SeC	GCCCGCTG <b>TGAc</b> CTTGGCTGGT <b>GTG</b> AGT <b>GCGGTCTT</b> CAAAAC <b>CGTAGAGG</b> CCGGAGG <b>CCTAGTGG</b> TT <b>CAA</b> TFCC <b>ac</b> tCGCGGGCG
Ser AGA	S1	C <b>CGGTC</b> GTGCCCGAGTGGT <b>TAA</b> GGGG <b>ACTGACTAGA</b> AA <b>T</b> CAG <b>TTGGGTT</b> CTCCCG <b>CATAGGTT</b> CGA <b>ATC</b> CTGT <b>CG</b> ACCCGG
Ser TGA	S2	GGTCAGTGGCCGAGTGGT <b>TAA</b> GGCGGT <b>GGACTTGA</b> AA <b>TCC</b> ACTGGG <b>TTCT</b> CCCG <b>CGCAGGTT</b> CGA <b>ATC</b> CTGT <b>ACT</b> GACCG
Ser CGA	S3	C <b>CGGTC</b> GTGCCCGAGTGGT <b>TAA</b> GGGG <b>CTGACT</b> CGA <b>AA</b> T <b>CAG</b> TGGGAT <b>CTCC</b> CG <b>CATAGGTT</b> CGA <b>ATC</b> CTGT <b>CG</b> ACCCGG
Ser GCT	S4	GCAC <b>CTGT</b> GGCCGAGTGGT <b>TAA</b> GGCGCGG <b>CCCTGCTA</b> AGG <b>CCGTG</b> GGG <b>TTCT</b> CCCG <b>CGT</b> CGG <b>TT</b> CGA <b>AT</b> CG <b>CAT</b> CGGGT <b>GC</b>
Thr AGT	T1	GC <b>ACTT</b> ATAGCTCAGTGGT <b>TAG</b> AGC <b>ACCCCTT</b> AG <b>TA</b> AGCGGGAGG <b>TTCTCC</b> AG <b>TT</b> CGA <b>AT</b> CTGGAT <b>AGT</b> GCA
Thr CGT	T2	GCTTCTATAGCTTAGTGGT <b>TAGAGCGT</b> TCC <b>CTT</b> CG <b>TA</b> AGGGAAAGG <b>TTCCCG</b> AG <b>TTCAAT</b> CTCGG <b>TGGG</b> AGCA
Thr TGT	T3	<b>GCTGGT</b> TAGCTCAGTGGT <b>TAG</b> AGCG <b>TTTGT</b> CT <b>TG</b> TAAACAAAGG <b>tCC</b> TGG <b>TT</b> CGA <b>ACCC</b> GGG <b>CTC</b> CAGCA
Pro TGG	P	GGGAG <b>TTTGGTCTAGGGG</b> TATGAT <b>CT</b> CG <b>CTT</b> GGG <b>TGC</b> GAGAGG <b>TC</b> CGGG <b>TT</b> CGAT <b>CCCG</b> CA <b>CTCCC</b>
Pro CGG	P	GGGAG <b>TTTGGTCTAGTGGT</b> ATGAT <b>CT</b> CG <b>CTT</b> CGG <b>TGC</b> GAGAGG <b>TC</b> ACGG <b>TT</b> CGAT <b>CCCG</b> TA <b>CTCCC</b>
Pro AGG	P	GGGAG <b>TTTGGTCTAGTGGT</b> ATGAT <b>CT</b> CG <b>CTT</b> AGG <b>GTGC</b> GAGAGG <b>TC</b> GGG <b>TTCA</b> AT <b>CCCG</b> CA <b>CTCCC</b>
Trp CCA	W	GG <b>CTCCGTGGCGTAA</b> TGGTGGCGG <b>TCGGATT</b> CCA <b>AA</b> TCCGAA <b>AGGTTGGGG</b> TT <b>CGATCC</b> CT <b>CCGGG</b> TCA
Val AAC	V1	GGAAT <b>CA</b> TGGTGTAGT <b>TTGGTT</b> TATCAC <b>ACCTGTCTA</b> ACACACAGGAGG <b>CTCCAGTT</b> CGAT <b>CTCG</b> ATGAT <b>TTCA</b>
Val CAC	V2	GT <b>CGT</b> CGTGGTGTGGT <b>TTGGTT</b> TATCAC <b>ATTC</b> GC <b>CTCAC</b> ACGCGAAAGG <b>CTCCAGTT</b> CGAT <b>CTCG</b> ACGACGACA
Val TAC	V3	GA <b>ACTCA</b> TGGTGTAGCGG <b>TAT</b> CA <b>CGT</b> CAGAT <b>TTAC</b> ACT <b>CTGA</b> AGG <b>TC</b> CCGG <b>TTCAAT</b> CCCG <b>GATGAGTTCA</b>
Tyr GTA	Y	CT <b>CTC</b> CA <b>TAG</b> CTCAGCTGGAAGAGCGAAAGG <b>ACTGTA</b> AA <b>TCT</b> TAGG <b>TC</b> GCC <b>CTTCGATCCGGGCTGGGG</b> GAGA
Ala p	Ap	GGGGATATAGCTCAGTGGT <b>TAGAGCGCT</b> GCCT <b>TTGCA</b> AGGCAGAT <b>GT</b> CAGCGG <b>TT</b> CGA <b>ATCC</b> CGT <b>TAT</b> CTCCA
Arg ACG p	R1p	GAGCTTGTAGCTCAGTGGACT <b>TAG</b> AGCACATGG <b>CTACGA</b> ACCATGGGG <b>TCGGGG</b> TT <b>TC</b> GAAAC <b>CTC</b> TGG <b>CT</b> CG
Arg TCT p	R2p	GGG <b>TT</b> CATCG <b>TTCA</b> ATGGAT <b>AGGAC</b> AGCGG <b>CTTCTA</b> AGCG <b>CTCA</b> ATG <b>TAG</b> TT <b>CGAT</b> CT <b>CT</b> ACTGGG <b>CTG</b>
Asp GTC p	Dp	GGGAT <b>GT</b> AGT <b>TTCA</b> AT <b>TGGT</b> TAGAGCAC <b>CCCGCTGTC</b> ACGGCGGA <b>AGT</b> TGCGGG <b>TT</b> CGAG <b>TCC</b> CGT <b>CAAT</b> CCCG
Asn GTT p	Np	T <b>CT</b> T <b>CAGT</b> AGCTCAGTGGT <b>TAGAGCGATCGGCTGTT</b> AACC <b>GAT</b> TTGG <b>TC</b> GTAGG <b>TTCA</b> AGT <b>CCT</b> AC <b>CTGGG</b> AG
Cys GCA p	Cp	GCCCG <b>CA</b> TAGCAAGCGG <b>TAA</b> GGCGGT <b>AGGATT</b> GCA <b>AA</b> CT <b>CTC</b> T <b>AT</b> TTCC <b>CAAGT</b> TC <b>AA</b> AT <b>CTGG</b> GTGCCGGCT
Gln TTG p	Qp	TGGGG <b>CT</b> CGCCAAGTGGT <b>TAA</b> GGT <b>TGCGGTTT</b> TTGG <b>TACC</b> CG <b>CA</b> TT <b>CGC</b> AGG <b>TT</b> CGA <b>ATC</b> CT <b>TC</b> CG <b>CC</b> CCAG
Glu TTC p	Ep	GCCCC <b>AT</b> CG <b>CT</b> AGAGG <b>CT</b> AG <b>AC</b> CC <b>CTTTC</b> ACCGGAGAAA <b>AC</b> CGG <b>ATT</b> CGA <b>AT</b> TC <b>CG</b> TGGGG <b>TA</b>
Gly GCC p	G1p	C <b>CGGAC</b> ATAGCTCA <b>AT</b> GGT <b>TAGAGT</b> AT <b>TTCT</b> CT <b>GGCA</b> AGGAA <b>ATG</b> TTGCGGG <b>TT</b> CG <b>ACT</b> CCCG <b>TTGT</b> CCGCT
Gly TCC p	G2p	C <b>CGGAT</b> G <b>TAA</b> CTCA <b>AT</b> CG <b>TAG</b> AGT <b>GCGAT</b> CT <b>TTCA</b> AG <b>TT</b> CGAGG <b>TTT</b> GGG <b>TT</b> CGAG <b>TCC</b> AT <b>CA</b> TCCG <b>CT</b>
His GTG p	Hp	CGGG <b>CA</b> TAGCAAGCGG <b>TAA</b> GGCAGTGGAT <b>TG</b> TG <b>ACTCC</b> ACT <b>AT</b> TCGCGGG <b>TT</b> CGA <b>ACCC</b> CTCG <b>T</b> TCG <b>CT</b>
Ile AAT p	I1p	GCGG <b>CTAT</b> AG <b>CT</b> CA <b>GT</b> GGT <b>TAGAGCGT</b> CT <b>CTT</b> G <b>ATA</b> AGGCAAAAG <b>TC</b> GAAAG <b>TTCAA</b> AT <b>CT</b> TT <b>CAT</b> AG <b>CCCA</b>
Ile TAT p	I2p	GC <b>ACTGT</b> TGGCCAGCGG <b>ATG</b> AGGCA <b>AC</b> GACT <b>CATA</b> AT <b>CGTT</b> ATAAG <b>GTTAGGTT</b> CA <b>ACTC</b> CTATACGG <b>TCGA</b>

Leu TAG p	L1p	GCCTTCGTGATGGAACCTGGTAGACATCCTGGTTT <b>TAGGA</b> ACCAGT <b>GCTG</b> AAAAGGCGT <b>GCCGGT</b> TCAAATCCGGCCGAAGGCA
Leu TAA p	L2p	GGGGATATGGCGGAATGGTAGACGCTACGGACT <b>TAAAA</b> TCCGTTCTTGTGCGAAC <b>CAAGGTGA</b> GGGTTCAAAGTCCCTCTTTCCCA
Lys TTT p	Kp	GGGTGCTAACTCAATGGTAGAGTACTCGGCT <b>TTTAA</b> CCGATAAGTTCTGGGTT <b>CGAGT</b> CCCAGTAACCCA
Meti CAT p	Mip	AGCAGGGTAGAGCAGTCTGGTAGCTCGTGGGGCT <b>CATAA</b> TCC <b>TGAGGTCGC</b> AGGTTCAAATCCTGCCCTTGCCA
Mete CAT p	Mep	GCCTGCTTAGCTCAGTTGGTTAGAGCGTCCGTT <b>TTCATA</b> AGCTGATTGTC <b>ACTAGT</b> TCAAATCTAGTAGCAGGCA
Phe GAA p	Fp	GCCGGGATAGCTCAGTTGGTAGAGCAAAGCGT <b>TGAAA</b> ATGCTTGGGTCACCGGTTCAAGTCCGGTTCCTGGCA
Ser AGA p	S1p	<b>GGAAA</b> GGTGGCAGAGTGGTT <b>AAATTC</b> ACCAATTT <b>TGAAA</b> ATTTGGCGTGGCTTCGCGGTCACCGAGGGTTCGAATCCCTCCCTTTCCG
Ser TGA p	S2p	<b>AGGAGAGATGGCTGAGTGGTCGAAA</b> AGCGGCTGATT <b>GCTA</b> ATCAGTTTAAAGTGC <b>ACTTGC</b> GCTTACGAGGGTTCGAATCCCTCTCTCCG
Thr TGT p	Tp	GCTTGCTTAACTCAATCGGTAGAGTATCGGTT <b>TGTAA</b> ACCGAAGGTTATCGGTTCAA <b>CTCCG</b> ATAGCAAGCT
Pro TGG p	Pp	CGGGATGTAGCGCCAGCTTGGTAGCGCATGTGCTT <b>TGGG</b> AGCATAGGGT <b>CGC</b> AGGTTCGAATCCTGT <b>CATCC</b> CGA
Trp CCA p	Wp	ACGTCCTTAGTTCAGTCGGTAGAACGCAGGTT <b>TCCAAA</b> ACCTGATGTCGTGGGTT <b>CAAT</b> TCCTACAGGGCGTG
Val AAC p	Vp	AGGCCATAACTCAGTCGGTAGAGTGATTG <b>CTTACA</b> AGCAATAGGTCATCGGTTCAAAGTCCGGTTGGGCCTA
Tyr GTA p	Yp	GGGTCGATGCCCCAGTGGTTAAATGGGGCGGAT <b>TGTA</b> AATCCGTT <b>GACTTAGTCT</b> GCCTTGGTTCGAATCCGACTCGACCA
3aS rRNA mt	3am	ATGAGTGCCTAAGCACTCAATTT <b>CGGTGCTCGT</b> GAAACCGAGCATCCAATACTAAAGAA <b>ACTTTACTGGCTTAGTACTGGGAC</b> CCCATTTTTAGTATACCTACATTATATACA
5.8S rRNA	5.8S	CAACTCTCAACAACGGATATCTTGGCTCTCGGATCGATGAAGAACGCAGCGAAATGCGATACGTAGTGTGAATTGCAGAAAT ACGTGAATCATCGAATCTTTGAACGCATATTGC <b>GCTCGAGGCTTCGGCCAAGAGCATG</b> TCTGCCTCAGCGTCGGGTT
5S rRNA p	5Sp	<b>CTTGGTGCCTTTGCTCAGTTG</b> GACCCACACCAATCCATCCCGAACTTGGTTGTGAAAAAGCTGAGGGGACTGAAGAAC TTTACGGGTCGCCGTCTGGAATCTCAGTTCTAGTGTAGGGTT

### Supporting information: Table S1.

Mitochondrial (mt), plastidial (p) and nuclear tRNA and rRNA gene sequences and oligonucleotide probes. used in this study. Oligonucleotides indicated by arrows were used for RT-PCR experiments, the others for Northern analyses.