

Specifications:

Gene:	<i>hCTPS1</i>
Accession:	NP_001896.2
Insert size:	1789bp
Concentration:	10µg at 0.2µg/µL

hCTP synthase cDNA Plasmid

CTPS1 CTP synthase 1 [*Homo sapiens* (human)]

Also known as: CTPS; GATD5; IMD24; GATD5A

Summary:

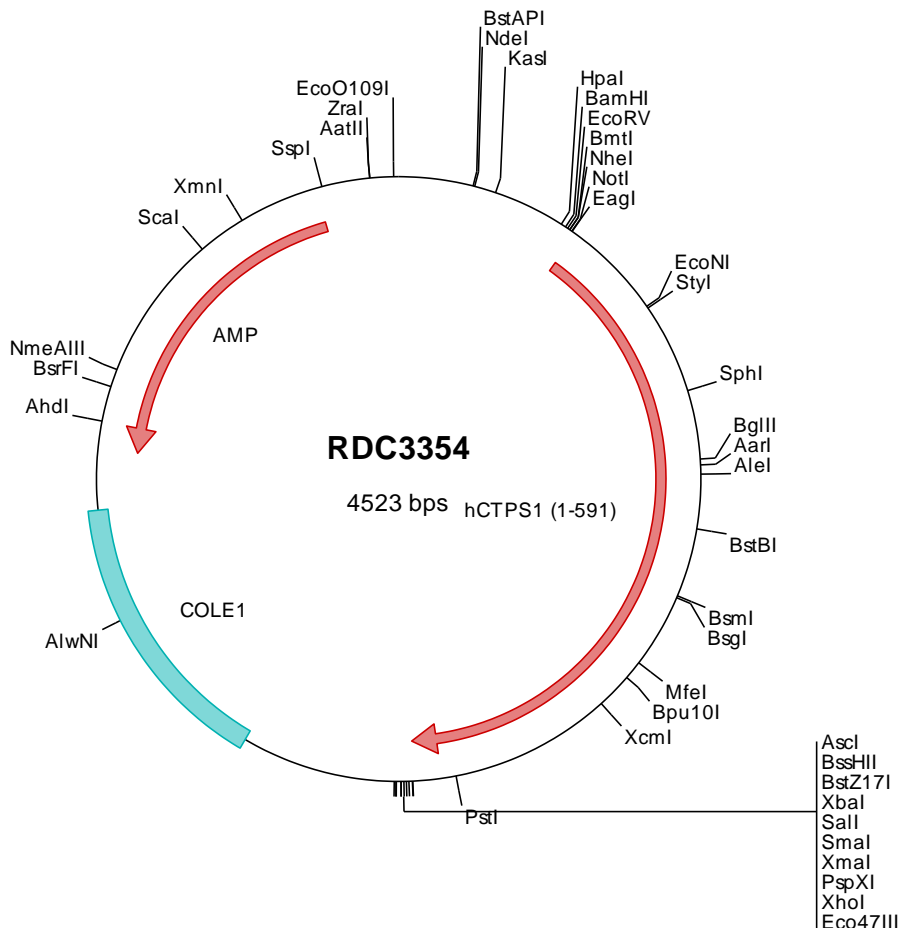
CTP synthase/CTPS1 an enzyme responsible for the catalytic conversion of UTP (uridine triphosphate) to CTP (cytidine triphosphate). This reaction is an important step in the biosynthesis of phospholipids and nucleic acids. Activity of CTPS1 is important in the immune system, and loss of function of CTPS1 has been associated with immunodeficiency. Alternatively spliced transcripts encoding different proteins have been described.

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping Ships at ambient temperature
Stability 1 year from date of receipt when stored at -20°C to -80°C
Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.



> RDC3354 Plasmid DNA Sequence

```

1 tcgctgctgtt cggatgatgac ggtgaaaacc totgacacat gcagctcccc gagacgggtca cagcttgtct gtaagcggat gccgggagca gacaagcccc
101 tcaggggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttactatag cggcatcaga gcagattgta ctgagagtgc accatattgc gtgtgaaata
201 ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgcatt caggctcgcg aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
301 tacgccagct ggcgaaaagg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgatt
401 ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccaacc atgaagtaca ttctggttac tgggtggttt atatoaggaa ttggaaaagg
501 aatcattgccc agcagtgctg gcaacaatact caagtcatgt ggtttacaat taacttcaat caaaattgac coctacatta acattgatgc aggaacattc
601 tctccttatg agcatggtga ggtttttgtg ctggatgatg gtggggaagt agacctgac ctgggtaact atgagcggtt ccttgacatc cgcctcacca
701 aggacaataa tctgaccact ggaagatat accagtatgt cattaacaag gaacggaaag gagattactt ggggaaaact gtccaagtgc tccctcatal
801 cacagatgca atccaggagt ggtgatgtag acaggcgtta atacctgtag atgaagatgg cctggaacct caagtgtgtg ttattgagct tggtggaacc
901 gtgggggaca tagaagcat gcocctttatt gaggccttcc gtcagttcca attcaaggtc aaagagaga actttttaa catcccagtc agtctagtcc
1001 cccagccaag ttcaacaagg gaacagaaga ctaaacctac ccagaatagt gttcgggaac ttagaggact tgggctttcc ccagatctgg ttgtatgcag
1101 gtgctcaaat ccacttgaca catcagtgaa ggagaaaata toaatgttct gccatgttga cctgaaacaa gtgatctgtg tccacgatgt ctcatccatc
1201 taacgagtcoc cctgtgtgtt agaggagcaa ggggtgttag attattttct tcgagaactt gaccttcta ttgagaggca gccagaaaaa atgtgatga
1301 aatggaaaaga gatggctgac agatatgata gcttctgga gacctgtctt attgcccctg ttggcaaaata cacgaagttc tcagactcct atgctctgt
1401 cattaagcct ctggagcatt ctgcaactgac catcaaccac aaattggaaa tcaagtacat agattctcgc gacttggagc ccatcaacctc gcaagaagag
1501 cccgtgcgct accaogaagc ttggcagaag ctctgtatgt cctatggagt gctggttcca ggaggattg gtgttcgagg aacagaagga aaaaaccaag
1601 caattgcctg ggctoggaat cagaaaaagc cttttttggg cgtgtgctta gggatgcagt tggcaattgt tgaatttcoa agaaaagtgc tgggatggca
1701 agatgccaat totaacagat ttgacctac gaccagtcac cccgtgctgc tagacatgcc agaacacaac ccagggcaga tggcgggaac ctgaggtctg
1801 gcaagaagga gaacctggtt ccagccaag aactcagtc taggaaactc ctatggagc gcagactact tggaaagag gcacctccac cgatttgagg
1901 tgaatocctt gttcgggttc agtaccaccc tgagttcctg tccaggccta tcaagcctc cccaccataa tttggcctcc tcttggcctc tgtggggcgt
2001 tccctttttt gttcgggttc agtaccaccc tgagttcctg tccaggccta tcaagcctc cccaccataa tttggcctcc tcttggcctc tgtggggcgt
2101 ctctcacatt acctocagaa gactcagcag ctctcaccga gggacaccta tagtgacagg agtggagca gctcccctga ctctgaaatc accgaactga
2201 agtttccatc aataaactcat ggctaaaggg cgccagatg actctagagt cgacacccgg ggaattcctc gagcgcctct ctctagcttg gcgtaatacat
2301 ggtcatagct gtttccctgt tgaatttgtt atccgctcac aattccacac aacatcacgag ccggaagcat aaagtgtaaa gcctgggggtg cctaagtgat
2401 gagctaactc acattaattg cgttgcgctc actgcccgcct tccagctcgg gaaacctgtc gtgccagctg cattaatgaa tcggcacaac gcgggggaga
2501 ggcggtttgc gtattggggc ctcttccgct tctcgcctca ctgactcgtc gcgctcggtc gttcggctgc ggcgagcgtt atcagctcac tcaaaagcgg
2601 taatacgggtt atccacagaa acgagggaaa gaacatgtga gcaaaaaggc agcaaaaaggc caggaacctg aaaaaggccc cgttctgtgc
2701 gtttttccat aggtcccgcc ccctgacga gcatacaaaa aactcagcct caagtcagag gtggcgaaac ccgacagagc tataaagata ccaggcgttt
2801 cccccgtgaa gctccctcgt gcgctctcct gttccgacct tgccgcttac cggataacct gcttcccttc tcccttcggg aagcgtggcg ctttctcaat
2901 gctcacgctg taggtatctc agttcgggtg aggtcgttcg ctccaagctg ggtctgtgtc acgaaacccc cgttcagccc gaccgctgct ccttatccgg
3001 taactatcgt cttgagtcca acccgtaag acacgactta tcgccaactg cagcagccac tggtaacaggg attagcagag gcaggtatgt aggcggtgt
3101 acagagttct tgaagtgggt gcctaactac ggtcactact gaaggacagt atttggatc tgcgctctgc tgaagccagt taccttcgga aaaagagttg
3201 ttgactcttg atccggcaaa caaacaccgc ctggtagcgg ttggtttttt gtttgcaagc agcagattac gcgcagaaaa aaaggtatct aagaagatcc
3301 tttgatcttt tctacggggt ctgacgcctca gtggaacgaa aactcacggt aagggatttt agttaccaga ggtcattgaga ggtatctcac ctatcctc
3401 ttaaattaaa aatgaagttt taaatcaatc taaagtatat atgagtaaac ttggtctgac agttaccaat gcttaatcag tgaggcacct atctcagcga
3501 tctgtctatt tcgttcatcc atagttgcct gactcccctg cgtgtagata actacgatac gggagggcctt accatctggc cccagtgctg caatgatacc
3601 gcgagaccca cgctocaccg ctccagatatt atcagcaata aaccagccag ccggaagggc cgagcgcaga agtggtcctg caactttatc cgctccatc
3701 cagctctatta attgttggcc ggaagctaga gtaagtattt gcgccagttaa tagtttggcc aacgttgtgt ccattgctac aggcactcgt gtgtcacgct
3801 cgtcgtttgg tatggcttca ttcagctccg gttcccacgc atcaaggcga gttacatgat cccccatggt gtgcaaaaaa gcggttagct ccttcggctc
3901 tccgatcgtt gtcagaagta agttggccgc agtgttatca ctcatggtta tggcagcact gcataattct cttactgtca tggcatcctg aagatgcttt
4001 tctgtgactg gtgagtactc aaccaagtca tctgagaat agtgtatgcg gcgaccgagt tgctcttgcc cggcgtcaat acgggataat accgcgccac
4101 atagcagaac tttaaaagtg ctcatcattg gaaaacgctt ttcggggcga aaactctcaa ggatcttacc gctgttgaga tccagttoga tghtaaccac
4201 tcgtgcaccc aactgatctt cagcatcttt tactttcacc agcgtttctg ggtgagcaaa aacaggaagg caaaaaggg aataagggcg
4301 acacggaaat gttgaatact catactcttc ctttttcaat attattgaag catttatcag ggttattgtc tcatgagcgg atacatattt gaatgtattt
4401 agaaaaataa acaaataggg gttccgcgca catttcccgg aaaagtgcca cctgacgtct aagaaaccaat tattatcatg acattaacct ataaaaatag
4501 gcgtatcacg aggcocctttc gtc

```

> RDC3354 Translated Insert Sequence

```

1 mkyilvtgqv isgigkiiia ssvgtilksc glhvtvikid pyinidagtf spyehgevfvd lddggevdlld lgnyerflidi rltkdnlltt gkiyqyvink
101 erkgdylgkt qvvpvhitda iqewvmrql ipvdedglep qvcvielggt vgdiesmpfi eafrrqfkgv krenfcnihv slvpqpsstg eqktkptqns
201 vrelrglgl pdlvvrcsn pldtsvkeki smfchvepeq vicvhdvssi yrvp1llleeq gvvdylfrrl dlpierqprk mlmkwkemad rydr1lletcs
301 ialvgkytkf sdsyasvika lehsalainh kleikyidsa dlepitsqee pvryheawqk lcsahgvlvp gfgvrgteg kiquaiawarn qkpkflgvcl
401 gmqlavvefs rnvlgwqdan stefdpttsh pvvvdmpeln pgqmggtmrl gkrtrlfqtk nsvmrklygd adyleerhrh rfevnpvkk cleegklkfv
501 qgdvegerme iveledhpfv vgvqyhpefl srpikpsppy fglllasvgr lshylqkqcr lsrpdytsdr sgsspsdsei telkfpsinh d

```