

Product datasheet for RC238218

CTP synthase (CTPS1) (NM_001301237) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CTP synthase (CTPS1) (NM_001301237) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CTPS1
Synonyms:	CTPS; GATD5; GATD5A; IMD24
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC238218 representing NM_001301237 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCCCTTTATTGAGGCCTTCCGTCAGTTCGAATCAAGGTCAAAGAGAGAAGCTTTGTAAATCCACG
TCAGTCTAGTTCCCGAGCAAGTTCAACAGGGGAACAGAAAGACTAAACCTACCCAGAATAGTGTTCCGGG
ACTTAGAGGACTTGGGCTTTCCCGAGATCTGGTTGTATGCAGGTGCTCAAATCCACTTGACACATCAGTG
AAGGAGAAAATCAATGTTCTGCCATGTTGAGCCTGAACAAGTATCTGTGTCCACGATGTCTCATCCA
TCTACCGAGTCCCCTTGTGTTAGAGGAGCAAGGGGTTGTAGATTATTTCTTCCAAGACTTGACCTTCC
TATTGAGAGGCAGCCAAGAAAAATGCTGATGAAATGAAAAGAGATGGCTGACAGATATGATCGCTTGCTG
GAGACCTGCTCTATTGCCCTTGTGGCAAATACACGAAGTTCTCAGACTCCTATGCCTCTGTCAATTAAGG
CTCTGGAGCATTCTGCACTGGCCATCAACCACAAATTGAAAATCAAGTACATAGATTCTGCGGACTTGGA
GCCATCACCTCGAAGAAGAGCCCGTGCCTACCACGAAGCTTGGCAGAAGCTCTGTAGTGCTCATGGA
GTGCTGGTCCAGGAGGATTTGGTGTTCGAGGAACAGAAGGAAAAATCCAAGCAATTGCCCTGGGCTCGGA
ATCAGAAAAAGCCTTTTTGGGCGTGTGCTTAGGGATGCAGTTGGCAGTGGTTGAATTCAGAAACGT
GCTGGGATGGCAAGATGCCAATTTACAGAGTTTGACCCTACGACCAGTCAATCCGTTGGTCTGAGACATG
CCAGAACAACCCAGGGCAGATGGGCGGAACCATGAGGCTGGGCAAGAGGAGAACCCTGTTCCAGACCA
AGAACTCAGTCATGAGGAACTCTATGGAGACGCAGACTACTTGAAGAGAGGCACCGCCACCGATTGA
GGTGAATCCAGTCTGGAAAAAGTGTGGAAAGAACAAGGCTTGAAGTTTGTGGCCAAGATGTTGAAGGA
GAGAGAATGAAAATTGTGGAGTTAGAAGATCATCCCTTTTTTGTGGGTTCACTACCACCTGAGTTCC
TGTCCAGGCTATCAAGCCCTCCCACCATACTTTGGCCTCCTCTGGCCTCTGTGGGGCGGCTCTCACA
TTACCTCCAGAAAGGCTGCAGGCTCTACCCAGGGACACCTATAGTGACAGGAGTGAAGCAGCTCCCT
GACTCTGAAATCACCGAAGTGAAGTTCCATCAATAAATCATGAC

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC238218 representing NM_001301237
Red=Cloning site Green=Tags(s)

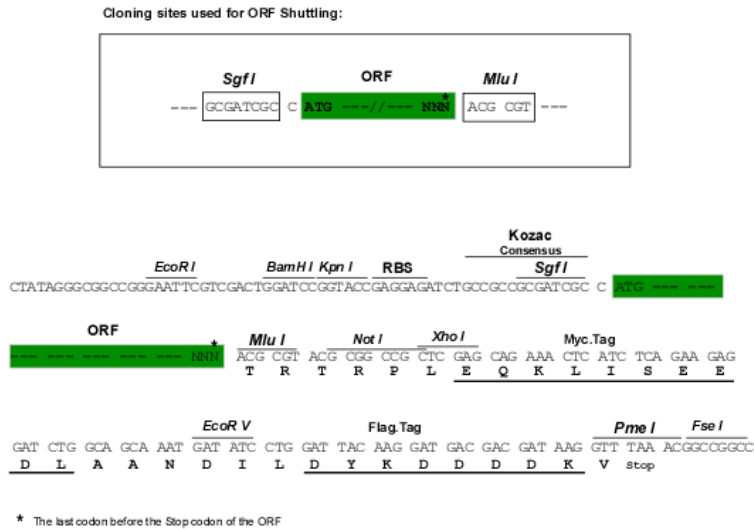
MPFIEAFRQFQFKVKRENF CNIHVSLVPQPSSTGEQKTKPTQNSVRELRLGLSPDLVVCRCNPLDTSV
 KEKISMFCHVEPEQVICVHDVSSIYRVPLLLLEEQGVVDYFLRRLDLP IERQPRKMLMKWKEMADRYDRLL
 ETC SIALVGKYTKFSDSYASVIKALEHSALAINHKLEIKYIDSADLEPIT SQEEPVRVHEAWQKLC SAHG
 VLVPPGGFVGRGTEGKIQAIAWARNQKKPFLGVCLGMQLAVVEFSRNVL GWQDANSTEFDP TTSHPVVVDM
 PEHNPQQMGGTMR LGKRRTL FQTKNSVMRKL YGDADYLEERHRH RFEVNPVWKKCLEEQGLKFV GQDVEG
 ERMEIVELEDHPFFVGVQYHPEFLSRPIKPSPPYFGLLLASVGR LSHYLQKGCRLSPRDTYS DRSGSSSP
 DSEITELKFPSINH D

TRTRPLEQKLISEEDLANDILDYKDDDDKV

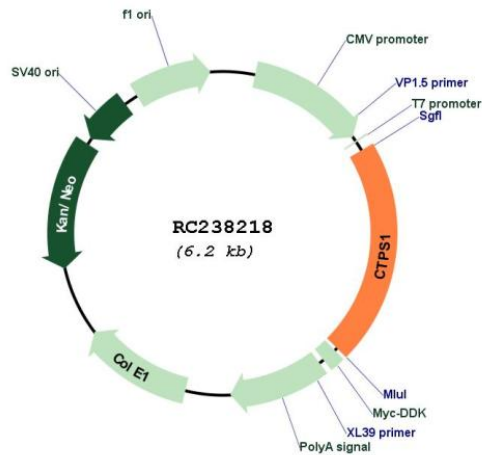
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001301237

ORF Size:	1305 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:	<ol style="list-style-type: none">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_001301237.2
RefSeq Size:	2412 bp
RefSeq ORF:	1308 bp
Locus ID:	1503
UniProt ID:	P17812
Cytogenetics:	1p34.2
Protein Pathways:	Metabolic pathways, Pyrimidine metabolism
MW:	50.1 kDa
Gene Summary:	This gene encodes 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 this protein is important in the immune system, and loss of function of this gene has been associated with immunodeficiency. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]