

## Product datasheet for **RG238218**

### 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:	TurboGFP
Symbol:	CTP synthase
Synonyms:	CTPS; GATD5; GATD5A; IMD24
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238218 representing NM_001301237. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTGTAAATACGACTCACTATAGGGCCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCCCTTTATTGAGGCCTTCCGTCAAGTCCAATTCAAGGTCAAAGAGAGAAGTCTTGTAAATCCAC
GTCAGTCTAGTCCAGCAAGTCAACAGGGGAACAGAAGACTAAACCTACCCAGAATAGTGTTCGG
GAAGTCTAGAGGACTTGGGCTTCCAGATCTGGTTGTATGCAGGTGCTCAAATCCACTTGACACATCA
GTGAAGGAGAAAAATCAATGTTCTGCCATGTTGAGCCTGAACAAGTGATCTGTGTCCACGATGTCTCA
TCCATCTACCGAGTCCCCTTGTGTTAGAGGAGCAAGGGTGTAGATTATTTCTCGAAGACTTGAC
CTTCTATTGAGAGGCAGCAAGAAAAATGCTGATGAAATGGAAAGAGATGGCTGACAGATATGATCGC
TTGCTGGAGACCTGCTCTATTGCCCTTGTGGGCAAATACACGAAGTTCTCAGACTCCTATGCCTCTGTC
ATTAAGGCTCTGGAGCATTCTGCACTGGCCATCAACCACAAATTGGAAATCAAGTACATAGATTCTGCG
GACTTGGAGCCATCACCTCGAAGAAGAGCCCGTGCCTACCACGAAGCTTGGCAGAAGCTCTGTAGT
GCTCATGGAGTGTGTTCCAGGAGGATTTGGTGTTCGAGGAACAGAAGGAAAAATCCAAGCAATTGCC
TGGGCTCGGAATCAGAAAAAGCCTTTTTGGGCGTGTGCTTAGGGATGCAGTTGGCAGTGGTTGAATTC
TCAAGAAACGTGCTGGGATGGCAAGATGCCAATTCTACAGAGTTTGACCTACGACCAGTCAATCCCGTG
GTCGTAGACATGCCAGAACAACCCAGGCAGATGGGCGGAACCATGAGGCTGGCAAGAGGAGAACC
CTGTTCCAGACCAAGAAGTCAAGTCAAGGAACTCTATGGAGACGACACTTGGAAAGAGAGGCAC
CGCCACCGATTTGAGGTGAATCCAGTCTGGAAAAAGTGTGGAAAGAACAGGCTTGAAGTTTGTGGC
CAAGATGTTGAAGGAGAGAGAATGGAAATGTGGAGTTAGAAGATCATCCCTTTTTTGTGGGGTTCAG
TACCACCTGAGTTCCTGTCCAGGCCTATCAAGCCCTCCCACCATACTTTGGCCTCCTCTGGCCTCT
GTGGGGCGGCTCTCACATTACCTCCAGAAAGGCTGCAGGCTCTCACCCAGGGACACCTATAGTGACAGG
AGTGAAGCAGTCCCCTGACTCTGAAATCACCGAACTGAAGTTTCCATCAATAAATCATGAC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG238218  
 Blue=ORF Red=Cloning site Green=Tag(s)

MPFIEAFRQFQFKVKRENF CNIHVSLVPQPSSTGEQKTKPTQNSVRELRLGLSPDLVVCRCNSPLDTS  
 VKEKISMFCHVEPEQVICVHDVSSIYRVPLLEEQGVVDYFLRRLDLPIERQPRKMLMKWKEMADRYDR  
 LLETCSIALVGKYTKFSDSYASVIKALEHSALAINHKLEIKYIDSADLEPITSQEPPVRYHEAWQLCS  
 AHGVLVPGGFVGRGTEGKIQAIAWARNQKPFLLGVCLGMQLAVVEFSRNVLWQDANSTEFDPDPTTSHPV  
 VVDMPEHNPGQMGTMRLLGKRRTLFQTKNSVMRKL YGDADYLEERHRHFEVNPVWKKCLEEQGLKFGV  
 QDVEGERMEIVELEDHPFFVGVQYHPEFLSRPIKPSPPYFGLLLASVGRLSHYLQKGCRLSPRDYSDR  
 SGSSSPDSEITELKFPSINH  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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](#)

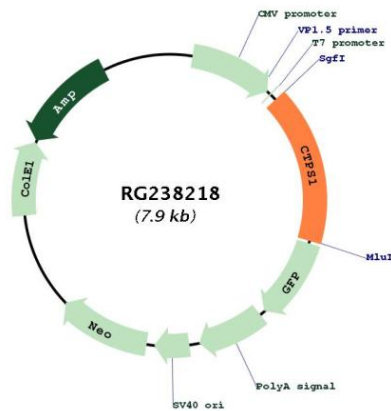
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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).

**RefSeq:** [NM\\_001301237.2](#)

RefSeq Size:	2412 bp
RefSeq ORF:	1308 bp
Locus ID:	1503
UniProt ID:	<a href="#">P17812</a>
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]

### Product images:



Circular map for RG238218