

## 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:	CTPS1
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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```



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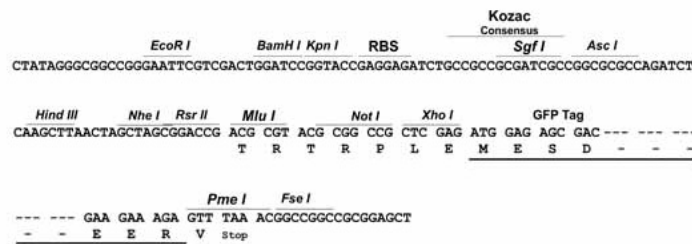
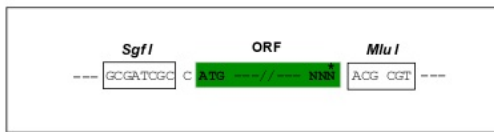
Protein Sequence: >Peptide sequence encoded by RG238218  
 Blue=ORF Red=Cloning site Green=Tag(s)

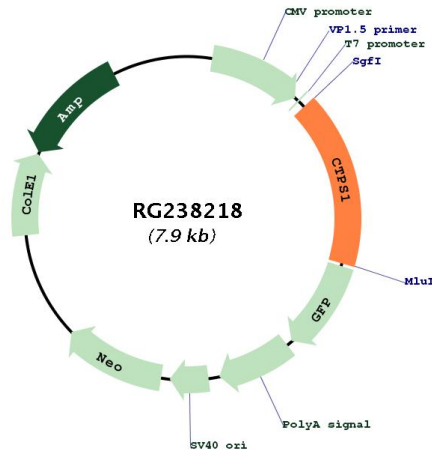
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Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



**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).

**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]