

## Product datasheet for **RG207225**

### **GFPT1 (NM\_002056) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GFPT1 (NM_002056) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GFPT1
Synonyms:	CMS12; CMSTA1; GFA; GFAT; GFAT 1; GFAT1; GFAT1m; GFPT; GFPT1L; MSLG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG207225 representing NM\_002056  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGTGTGGTATATTTGCTTACTTAACTACCATGTTCTCGAACGAGACGAGAAATCCTGGAGACCCTAA  
TCAAAGGCCTTCAGAGACTGGAGTACAGAGGATATGATTCGCTGGTGTGGGATTTGATGGAGGCAATGA  
TAAAGATTGGGAAGCCAATGCCTGCAAAATCCAGCTTATTAAGAAGAAAGGAAAAGTTAAGGCACTGGAT  
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CCC GTTGGGCAACACATGGAGAACCAGTCTGTCAATAGCCACCCCGAGCGCTCTGATAAAAAATAATGA  
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GGAAATATTTGAGCAGCCAGAGTCTGTCGTGAACACAATGAGAGGAAGAGTCAACTTTGATGACTATACT  
GTGAATTTGGGTGGTTGAAGGATCACATAAAGGAGATCCAGAGATGCCGGCGTTTGATTCTTATTGCTT  
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ACAAAAAGAACGATCAAGGTGCCCACTCGGTGGACTGCTTGCAGGGCATTCTCAGCGTGATCCCTTTAC  
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TGTGACTGTAGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

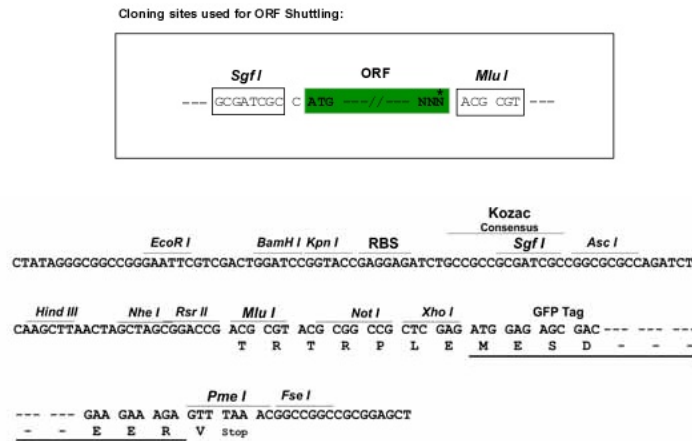
**Protein Sequence:** >RG207225 representing NM\_002056  
 Red=Cloning site Green=Tags(s)

MCGIFAYLNYHVPRTREILETLIKGLQRLEYRGYDSAGVGFDDGNDKDWEANACKIQLIKKKGKVKALD  
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 YDFESETDTETIAKLVKMYDNRRESQDTSFTTLVERVIQQLEGAFALVFKSVHFPGQAVGTRRGSPLLI  
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 VAAVVDGRLSIHRIKRTAGDHPGRAVQTLQMEQLQIMKGNFSSFMQKEIFEQPESVNTMRGRVNFDDYT  
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 EITYMHSEGILAGELKHGPLALVDKLMPIVIMIMRDHTYAKCQNALQQVVARQGRPVVICDKEDTETIKN  
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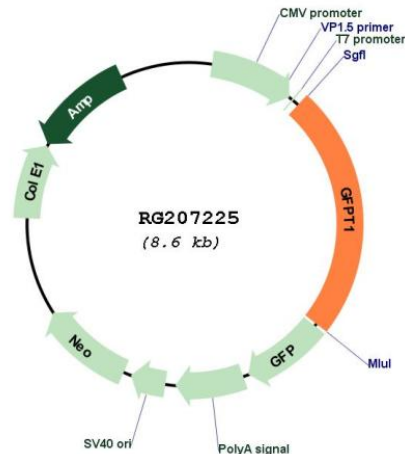
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



## Plasmid Map:



ACCN: NM\_002056

ORF Size: 2043 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_002056.1</a> , <a href="#">NP_002047.1</a>
<b>RefSeq Size:</b>	3082 bp
<b>RefSeq ORF:</b>	2046 bp
<b>Locus ID:</b>	2673
<b>UniProt ID:</b>	<a href="#">Q06210</a>
<b>Cytogenetics:</b>	2p13.3
<b>Domains:</b>	GATase_2, SIS
<b>Protein Families:</b>	Protease
<b>Protein Pathways:</b>	Alanine, aspartate and glutamate metabolism, Amino sugar and nucleotide sugar metabolism, Metabolic pathways
<b>Gene Summary:</b>	This gene encodes the first and rate-limiting enzyme of the hexosamine pathway and controls the flux of glucose into the hexosamine pathway. The product of this gene catalyzes the formation of glucosamine 6-phosphate. [provided by RefSeq, Sep 2008]