

## Product datasheet for **RG207224**

### **GCLM (NM\_002061) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** GCLM (NM\_002061) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** GCLM  
**Synonyms:** GLCLR  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RG207224 representing NM\_002061  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGC**C

ATGGGCACCGACAGCCGCGGGCCAAGGCGCTCCTGGCGGGGCCCGCACCTGCACCTGCAGACGGGGA  
ACCTGCTGAAGTGGGGCCGCTGCGGAAGAAGTGCCCGTCCACGCACAGCGAGGAGCTTCATGATTGTAT  
CCAAAAACCTTGAATGAATGGAGTTCCAAATCAACCCAGATTTGGTCAGGGAGTTCCAGATGTCTTG  
GAATGCACTGTATCTCATGCAGTAGAAAAGATAAATCCTGATGAAAGAGAAGAAATGAAAGTTTCTGCAA  
AACTGTTCAATTGTAGAATCAAATCTTCATCATCAACTAGAAGTGCAGTTGACATGGCCTGTTTCAGTCTT  
TGGAGTTGCACAGCTGGATTCTGTGATCATTGCTTCACCTCCTATTGAAGATGGAGTTAATCTTTCCTTG  
GAGCATTTACAGCCTTACTGGGAGGAATTAGAAAACCTTAGTTCAGAGCAAAAAGATTGTTGCCATAGGTA  
CCTCTGATCTAGACAAAACACAGTTGGAACAGCTGTATCAGTGGGCACAGGTAACCAAAATAGTAACCA  
AGTTAATCTTGCCTCCTGCTGTGTGATGCCACCAGATTTGACTGCATTTGCTAAACAATTTGACATACAG  
CTGTTGACTCACAATGATCCAAAAGAACTGCTTCTGAAGCAAGTTTCCAAGAAGCTCTTCAGGAAAGCA  
TTCCTGACATTCAGCGCACGAGTGGTGCCGCTGTGGCTACTGCGGTATTCGGTCATTGTGAAAAGTAG  
AGGAATTATCAAATCAAAGGCTACATTTTACAAGCTAAAAGAAGGGGTTCT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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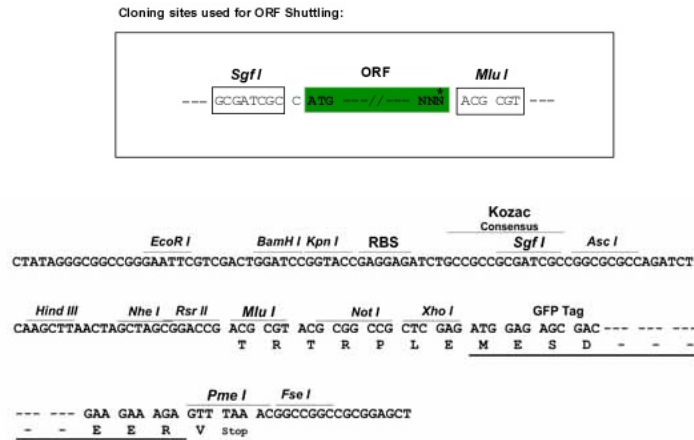
Protein Sequence: >RG207224 representing NM\_002061  
 Red=Cloning site Green=Tags(s)

MGTD SRAAKALLARARTLHLQTGNLLNWGLRKKCPSTHSEELHDCIQKTLNEWSSQINPDLVREFPDVL  
 ECTVSHAVEKINPDEREEMKVS AKLFIVESSSSSTRSAVDMACSVLGVAQLDSVIIASPPIEDGVNLSL  
 EHLQPYWEELENLVQSKKIVAIGTSDLDKTQLEQLYQWAQVKPNSNQVNLASCCVMPPDLTAF AKQFDIQ  
 LLTHNDPKELLSEASFQEALQESIPDIAHEWVPLWLLRYSVIVKSRGIKSKGYILQAKRRGS

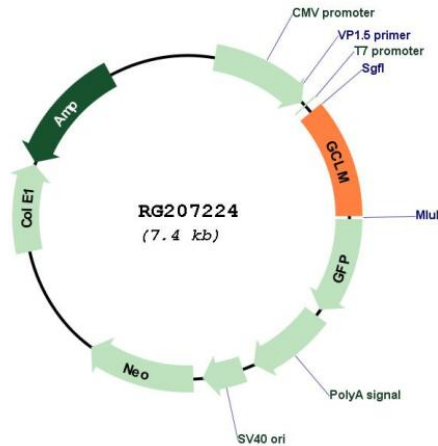
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_002061  
 ORF Size: 822 bp

<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>RefSeq:</b>	<p><a href="#">NM_002061.4</a></p>
<b>RefSeq Size:</b>	<p>3074 bp</p>
<b>RefSeq ORF:</b>	<p>825 bp</p>
<b>Locus ID:</b>	<p>2730</p>
<b>Protein Families:</b>	<p>Druggable Genome</p>
<b>Protein Pathways:</b>	<p>Glutathione metabolism, Metabolic pathways</p>
<b>Gene Summary:</b>	<p>Glutamate-cysteine ligase, also known as gamma-glutamylcysteine synthetase, is the first rate limiting enzyme of glutathione synthesis. The enzyme consists of two subunits, a heavy catalytic subunit and a light regulatory subunit. Gamma glutamylcysteine synthetase deficiency has been implicated in some forms of hemolytic anemia. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Apr 2015]</p>