

## Product datasheet for **RR210532**

### Gclm (NM\_017305) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Gclm (NM\_017305) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Gclm  
**Synonyms:** Glclr  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RR210532 representing NM\_017305  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGGCACCGACAGCCGCGCGGCCGGAGCACTTCTGGCGCGGGCCAGCACCTGCACCTGCAGACCCGGA  
ACCTGCTCAACTGGGGCCGCTGCGGAAAAAGTGTCCGTCCACGCACAGCGAGGAGCTTCGAGACTGTAT  
CCAAAAGACCTTGAATGAATGGAGCTCCCAAATCAGCCCTGATTTGGTCAGGGAGTTTCCAGATGTTTTG  
GAATGTACCATGTCCCATGCAGTGGAAAAGATAAACCCCTGATGAAAGAGAAGAAATGAAAGTTTCTGCTA  
AACTGTTCAATTGTAGGATCGAATTCTTCATCATCAACTAGAAATGCAGTTGACATGGCATGCTCAGTCCT  
TGGAGTTGCACAGCTGGACTCTGTATCATATGGCTTCCCTCCAATTGAAGATGGAGTTAATCTTTCCCTTG  
GAGCATTGTCAGCCTTACTGGGAGGAATTAGAAAACCTTAGTTTCAGAGCAAGAAGATTGTTGCTATAGGCA  
CCTCGGATCTAGACAAAACACAGTTGGAGCAGCTGTACCAGTGGGCACAGGTAACCCCAATAGTAATCA  
AGTTAATCTTGCCTCCTGCTGTGTGATGCCACCAGATTTGACTGCATTTGCTAACAGTTTGACATACAG  
CTACTGACTCACAATGACCCAAAAGAACTGCTCTCTGAGGCAAGTTTCCAGGAAGCTCTTCAAGAAAAGCA  
TCCCTGACATTGAAGCCAGGAGTGGGTGCCACTGTGGCTGCTGAGGTAAGTACTCGGTATCGTGAAGGAGCAG  
AGGAATCATCAAGTCAAAAGGATACATTTTGAAGCCAAAAGAAAGGGTTCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR210532 representing NM\_017305  
Red=Cloning site Green=Tags(s)

MGTDSRAAGALLARASTLHLQTGNLLNWGRLRKKCPSTHSEELRDCIQKTLNEWSSQISPDLVREFPDVL  
 ECTMSHAVEKINPDEREEMKVS AKLFI VGSNSSSTRNAVDMACSVL GVAQLDSVIMASPPIEDGVNLSL  
 EHLQPYWEELENLVQSKKIVAIGTSDLDKTQLEQLYQWAQVKPNSNQVNLASCCVMPPDLTAF AKQFDIQ  
 LLTHNDPKELLSEASFQEALQESIPDIEAQEWVPLWLLRYSVIVKSRGIKSKGYILQAKRKGS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_017305

**ORF Size:** 822 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:**

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\\_017305.2](#), [NP\\_059001.1](#)

**RefSeq Size:** 1524 bp

**RefSeq ORF:** 825 bp

**Locus ID:** 29739

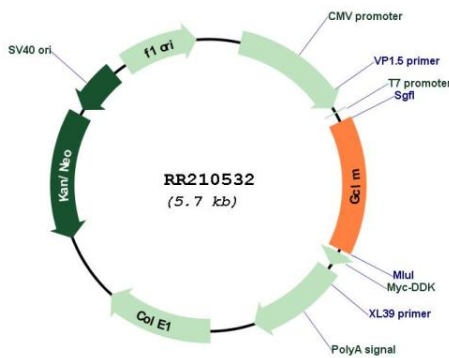
**UniProt ID:** [P48508](#)

**Cytogenetics:** 2q41

**MW:** 30.5 kDa

**Gene Summary:** an integral part of the enzyme gamma-glutamylcysteine synthetase, which catalyzes the first step of glutathione (GSH) synthesis [RGD, Feb 2006]

**Product images:**



Circular map for RR210532