

Product datasheet for SC118877

GCLM (NM_002061) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GCLM (NM_002061) Human Untagged Clone
Tag:	Tag Free
Symbol:	GCLM
Synonyms:	GLCLR
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>OriGene ORF within SC118877 sequence for NM_002061 edited (data generated by NextGen Sequencing)

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ATGGGCACCGACAGCCGCGGGCAAGGCGCTCCTGGCGGGCCCGCACCTGCACCTG
CAGACGGGGAACCTGCTGAACTGGGGCCGCTGCGGAAGAAGTGCCCGTCCACGCACAGC
GAGGAGCTTCATGATTGTATCCAAAAACCTTGAATGAATGGAGTTCCAAATCAACCCA
GATTTGGTCAGGGAGTTCCAGATGTCTTGAATGCACTGTATCTCATGCAGTAGAAAAG
ATAAATCCTGATGAAAGAGAAGAAATGAAAGTTTCTGCAAACTGTTCAATGTAGAAATCA
AACTCTTCATCATCAACTAGAAGTGCAGTTGACATGGCCTGTTCACTCCTGGAGTTGCA
CAGCTGGATTCTGTGATCATTGCTTACCTCCTATTGAAGATGGAGTTAATCTTTCCTTG
GAGCATTTACAGCCTTACTGGGAGGAATTAGAAACTTAGTTCAGAGCAAAAAGATTGTT
GCCATAGGTACCTCTGATCTAGACAAAACACAGTTGGAACAGCTGTATCAGTGGGCACAG
GTAAAACCAAATAGTAACCAAGTTAATCTTGCCTCCTGCTGTGTGATGCCACCAGATTTG
ACTGCATTTGCTAAACAATTTGACATACAGCTGTTGACTCACAATGATCCAAAAGAAGTGC
CTTTCTGAAGCAAGTTTCCAAGAAGCTTTCAGGAAAGCATTCTGACATTCAAGCGCAC
GAGTGGGTGCCGCTGTGGCTACTGCGGTATTCGGTCATTGTGAAAAGTAGAGGAATTATC
AAATCAAAGGCTACATTTTACAAGCTAAAAGAAGGGTCTTAA
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Clone variation with respect to NM_002061.2



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002061 unedited
GGTTCAAATTTGTATACGACTCATATAGGCGGCCGCGCGCGCCGCTGCCTGCCCGCC
CGCCCGCAGCCCCCTTCGCTGCGCGGCCCTGGGCGGCCGCTGCCATGGGCACCGACAGCC
GCGCGGCAAGGCGCTCCTGGCGGGGCCCGCACCTGCACCTGCAGACGGGAACTGC
TGAAGTGGGGCCGCTGCGGAAGAAGTGCCCGTCCACGCACAGCGAGGAGCTTCATGATT
GTATCCAAAAACCTTGAATGAATGGAGTTCCTCAATCAACCCAGATTTGGTCAGGGAGT
TTCCAGATGTCTTGAATGCATGTATCTCATGCAGTAGAAAAGATAAATCCTGATGAAA
GAGAAGAAATGAAAGTTTCTGCAAAACTGTTTCATTGTAGAATCAAACTTTCATCATCAA
CTAGAAGTGCAGTTGACATGGCCTGTTCACTCCTTGGAGTTGCACAGCTGGATTCTGTGA
TCATTGCTTACCTCCTATTGAAGATGGAGTTAATCTTTCCTTGGAGCATTACAGCCTT
ACTGGGAGGAATTAGAAAAGTTCAGAGCAAAAAGATTGTTGCCATAGGTACCTCTG
ATCTAGACAAAACACAGTTGGAACAGCTGTATCAGTGGGCACAGGTAAAACCAAATAGTA
ACCAAGTTAATCTTGCTCCTGTGTGATGCCACCAGATTTGACTGCATTTGCTAAAC
AATTTGACATACAGCTGTTGACTACAATGATCCAAAAGAAGTCTTTCTGAAGCAAGTT
CCAAGAAGCTCTCAGAAAGCATTCTGACATTACAGCGACGAANTGGGTGCCGCTGTGG
CTACTGGCGTATTTCCGGTCATTGNGGAAAGTNNAGGAATATCAATCAAAGGCTACTTNTA
CAGCTAAGAAAGGGTCTNAACTGACTAGAGCATACTACTTGGAAATNCCTCCATAGANAA
A

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002061 unedited
GGGGGCGGNTGTCTTCTCCCCCGGCAGATTTGAACCGGCCGATCTTATGATCGA
TTTTTTTTTTTTTTTTTGAAGGAGTCTCGCTTTGTCGCCAGGCTGGAGTGCAGTGA
TGTGATCTCGGCTCACTGTAACCTCCGCCTCCGGGTTCAAGNGATTNCTGCCTTAGC
CTCCCAAGTACCTGATATTACAAGCGAGTGCCACCAGCCAGCCAATTTTTGTATTTA
GCCACAGATGCGGCTCACCATGTTGGCCAGGCTGGTCTCAAACCTCTGACCTCGCGATC
TGCCACCTCCGCCCCACAAAGTCTGGTATTACAGGTGCCAGCCACTGCGCCCGCACGA
AATACAACAAATTTTCAAAGAAAGATTTACACTATTACAGCTTACCACACCCCAATTT
ATACACATAACGATACTTCATAGCGCACATCACCAGCTCATACCTTATCTATTGCGCAAT
GTTGACGCCCCGAAAACCAATGCACCAATTAACCTACCTGACTTTTACATTTTTATTCCA
CCTACAAACCTCTCACTCCTACCACTACTCCCCCTACAACACCCACACCAATATCTTAA
AACTCGTTCACCTCTATAAAGTACTGACCCGCAATCAAGCAATCTTTTTACCCCCCC
CATCTGGCCCTTAAACCCCTCCACAACACCCACACACGGGGGAAAAATAAACCTACC
ACACTTCACTAAATAAGAATCTAAATTCCTACAATCTAATTGCCCTACCTTTTTCTC
CAACGCTCTCTACGAATTCACAAACATCGCAACAAACCATTTAATCTTCCCTCCAGCC
TCTTATTCACTACTACCCCAAACCAACCCCTTCCATGTGCATCAACATATCATTATT
AACCAAATNCCGGATATGCACCGTCCCATAGCACTCTCCTCCCTTTACCACAACACTCC
CTACAACACTACTCTTTTATAAGAGCTGTCTAAGTCTCTCTCCTCCAAANATAATAAC
TCTTCCGCTATCTTCTCTCTCTCCATCAGCCACCACTATCACACAATCAGATCGCGAC
CTCAAACAATCTNAAAGTGTCCAATCTATATCACACACTTTCATCAACTCTCTTAAACCA
TAATACACATCTNCGGAATATACATCACACCTATCCCTCN

Restriction Sites:

NotI-NotI

ACCN:

NM_002061

Insert Size:

2630 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 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](#)

RefSeq: [NM_002061.2](#), [NP_002052.1](#)

RefSeq Size: 3074 bp

RefSeq ORF: 825 bp

Locus ID: 2730

Protein Families: Druggable Genome

Protein Pathways: Glutathione metabolism, Metabolic pathways

Gene Summary: 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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).