

Product datasheet for **MG211473**

Gldc (NM_138595) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gldc (NM_138595) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gldc
Synonyms:	b2b2679Clo; D030049L12Rik; D19Wsu57e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG211473 representing NM_138595 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGCTGTGTGCCAGGGCATGGGGCTGCGCCTGGGCCGCGGAGCCGGGGGGGCCACCGCTGGCTC
GGGGCACCGGCTTGAGTTGGGCGCAGCGAAGCCGGGACAGCAGCGCGCGGTGGCGGTGGCGGTGGCGG
GGACCGCGCGCGGCTGGGGCTCGCGCTTCTGGAGCGCCTCCTGCCAGACACGATGACTTCTCCCGG
AGACACATCGGCCCGGAGACAAAGACCGGAGGGAGATGCTGCAGGCGCTGGGGCTGGCGAGCATTGATG
AGCTCATCGAGAAGACGGTCCCCGCCAGCATCCGCTTGAAGAGACCCTTGAAAATGGAAGACCCTATTTG
TGAGAATGAAATCCTCGAGACTCTGCATGCCATTGCAAGCAAGAACCAGATCTGGAGGTCGTATATTGGC
ATGGGCTATTACAACCTGCTCGGTGCCCCAGACCATTTTGCGGAACCTACTGGAGAATTCTGGATGGGTCA
CCCAGTACACTCCGTATCAGCCAGAGGTGTCCCAGGGGAGGCTGGAGAGTTTACTCAACTACCAGACCAT
GGTGTCTGACATCACAGGCTTGGACATGGCCAACGCTTCCCTGCTGGATGAGGCAACCGCGGCTGCAGAG
GCGATGCAACTGTGCCACAGACACAACAAGAGGAAGAAATTTTCGTTGATCCTCGTTGTCAACCCACAGA
CGATAGCTGTTGTCCAGACTCGAGCCAAATATAGGGGGTGTCTTGTGAGCTGAAGTTACCCACGAAAT
GGATTTTCAGTGGCAAAGACGCTCTGTGGGTGCTGTTCCAGTACCCAGACACTGAGGGGAAGTGGAGGAC
TTCACAGAACTTGTAGACAGAGCCCATCAGACTGGGAGCCTGACCTGCTGTGCTACTGACTTTTAGCTC
TGTGATTTTGGGCCACTGGAGAGTTTGGAGTGGACATTGCCCTGGGCAACTCCAGAGATTTGGAGT
GCCACTGGGCTATGGGGACCGCATGCGCCTTCTTTGCTGTCAAAGAAAACCTGGTGAGGATGATGCCT
GGAAGGATGGTGGGGTGACAAGGGATGCCACAGGGAAGGAAGTGTATCGCCTCGCTCTCCAGACCAGAG
AACACACATCCGGAGAGACAAAGCCACCAGCAACATCTGCACGGCTCAGGCCCTTTAGCCAACATGGC
TGCCATGTTCCGCAATTTACCATGGATCCCAGGGGCTGAAGCACATTGCTAAAAGGGTTTATAATGCTACT
TTGATTTGTCTGAAGGGCTCAAGCGAGCAGGACCAACTCCAGCATGACCTGTTCTTTGACACTTTGA
AGGTTTCAGTGTGGCTGCTCAGTGAAGGAGGTGCTGGGCAGAGCAGCTCAGAGGCAATCAACTTTGACT
CTTCGATGACGGCACACTTGGCATTCTTTGGATGAAACAGTCACTGAGAAAGATCTGGATGATTTACTG



[View online »](#)

TGGATCTTCGGCTGTGAGTCATCTGCAGAATTAGTTGCTGAAGGCATGGGAGAGGAGCGGAGAGGTCTTC
 TAGGGTCTTCATTCAAGAGAACCAGCCCGTTCTCACTCATCAGGTGTTCAACAGCTATCACTCAGAAAAC
 TAATCTTGTCCGGTATATGAAGAACTGGAGAACAAGACATCTCCCTCGTTCACAGCATGATCCCCTG
 GGATCCTGCACCATGAAGCTCAATAGCTCCTCCGAACTTGACCCCATCACCTGGAGAGAATTTGCCAACA
 TCCACCCTTTGTGCCGCTGGACCAAGCCAGGGATACCAACAGCTTTTCCAAGGGCTGGAGAAGGATCT
 GTGTGAGATCACAGGCTACGACCGAGTCTCATTCCAGCCAAACAGCGGAGCGCAGGGGGAGTACGCCGGA
 CTGGCCACCATCAGAGCGTACTTAGACCAGAAAGGAGAGAGACACAGAACAGTCTGTCTCATTCCCTAAGT
 CAGCACATGGAACGAATCCAGCAAGCGCTCACATGGCGGGCATGAAGATCCAGCCTGTGGAGGTGGACAG
 ATACGGGAACATCGATGTGGCTCACCTCAAGGCCATGGTGGACCAACACAAGGAGAACCTGGCCGCCATC
 ATGATCACGTATCCATCTACCAATGGTGTATTTGAAGAGAATATCGGCGATGTGTGCGCCCTGATTACCC
 AACACGGAGGACAGGTCTACCTCGACGGGGCGAACATGAATGCCAGGTGGGAATCTGCCGCCCTGGGGA
 CTTTGGGTGAGACGTCTCTCACCTAAATCTTACAAGACCTTCTGCATTCACCGAGGGGGGGCTCT
 GGCATGGGGCCCATCGGAGTGAAGAAGCACCTCAGCCCTTTCTGCCAGCCACCCCGTCATTTCCATAA
 AGCCAACGAAGGCACCTGGCCCGTGGGACTGTCAGTGCAGCCCGTGGGGTTCAGCTCCATCCTGCC
 CATTTCATGGGCTTACATTAAGATGATGGGTGAAAGGGCCTCAAAGAAGCCACAGAAATGCCATTCTA
 AATGCCAACTACATGGCCAAACGACTAGAGAAACACTACAGAGTCTCTTTAGAGGTGCAAGAGGGTATG
 TGGCTCATGAGTTTATCTTGGACACCCGACCCTTCAAAAAGTCTGCCAATGTTGAGGCTGTGGATGTTGC
 CAAGAGGCTCCAGGATTATGGATTTACGCCCTACCATGTCTGGCCTGTGGCAGGGACTCTCATGATT
 GAGCCACCGAGTCAGAAGACAAGGCAGAGCTCGACAGATTCTGTGATGCTATGATCAGCATCAGGCAAG
 AAATCGCTGACATAGAGGAGGGCCGCATCGACCCGAGGGTCAACCCCTGAAGATGTCTCCACACTCCTT
 GACCTGTGTCACATCCTCTGCTGGGATCGGCCGATTCTAGAGAGGTAGCAGCATTTCCACTGCCCTTT
 GTGAAACCAGAGAACAATCTGGCCAACATTGCCCGGATCGATGACATCTACGGAGATCAGCACTTGG
 TCTGCACCTGCCGCCCATGGAGGTCTATGAGTCTCCATTTTCTGAACAGAAGAGGGCTTCTTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG211473 representing NM_138595
 Red=Cloning site Green=Tags(s)

MQLCARAWGLRLGRGAGGHRLARGTGLSWAQRSRDSGGGGGGGGDRGAAGASRLLERLLPRHDDFSR
 RHIGPGDKDRREMLQALGLASIDELIEKTPASIRLKRPLKMPICENEILETLHAIASKNQIWRYSYIG
 MGYNCSVPQTILRNLENLGSWVTQYTPYQPEVVSQGRLESLLNYQTMVSDITGLDMANASLLDEATAAAE
 AMQLCHRHNKRKFFVDPCHPQTIHAVVQTRAKYRGVVELKLPHEMDFSGKDVCVGLFQYPTDEGKVED
 FTELVDRAHQTGSLTCCATDLLALCILRPPGEFGVDIALGNSQRFVPLGYGGPHAAFFAVKENLVRMMP
 GRMVGVTRDATGKEVYRLALQTRQHIRRDKATSNICTAQLLANMAAMFAIYHGSQGLKHIKRVHNAT
 LILSEGLKRAGHQLQHDLFFDTLKVQCGCSVKEVLGRAAQRQINFRLFDDGTLGISLDETVTEKDLDDL
 WIFGCESSAELVAEGMGEERRGLLGSSFKRTSPFLTHQVFNSYHSETNLVRYMKLENKDISLVHSMIPL
 GSCTMKNLSSSELAPITWREFANIHPFVPLDQAQGYQLFQGLEKDLCEITGYDRVSFQPNSSGAQGEYAG
 LATIRAYLDQKGERHRTVCLIPKSAHGTPASAHMAGMKIQPVEVDRYGNIDVAHLKAMVDQHKENLAAI
 MITYPSTNGVFEENIGDVCALIHQGGQVYLDGANMNAQVVICRPGDFGSDVSHLNLHKTFICPHGGGGP
 GMGPIGVKHLSPFLPSHPVISIKPTEGTWPVGTVSAAPWGSSSILPISWAYIKMMGGKGLKEATEIAIL
 NANYMAKRLKHYRVLFRGARGVVAHEFILDTRPFKKSANVEAVDVAKRLQDYGFHAPTMSWPVAGTLM
 EPTESDKAELDRFCDAMISIRQEIADIEEGRIDPRVNPLKMSPHSLTCVTSSCWDRPYSREVAAPLPLP
 VKPENKFWPTIARIDDIYGDQHLVCTCPPMEVYESPFSEQKRASS

TRTRPLE - GFP Tag - V

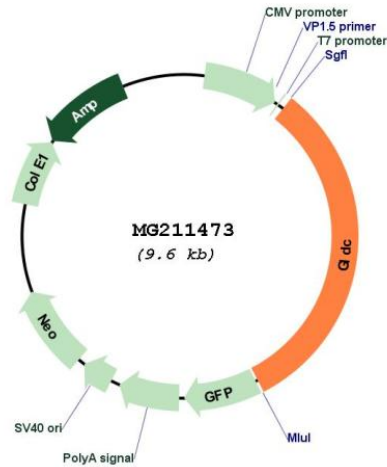
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_138595

ORF Size: 3075 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:	<ol style="list-style-type: none">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_138595.2
RefSeq Size:	3769 bp
RefSeq ORF:	3078 bp
Locus ID:	104174
UniProt ID:	Q91W43
Cytogenetics:	19 24.87 cM
Gene Summary:	The glycine cleavage system catalyzes the degradation of glycine. The P protein (GLDC) binds the alpha-amino group of glycine through its pyridoxal phosphate cofactor; CO(2) is released and the remaining methylamine moiety is then transferred to the lipoamide cofactor of the H protein (GCSH) (By similarity).[UniProtKB/Swiss-Prot Function]