

## Product datasheet for **MR221638**

### Gls2 (NM\_001033264) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gls2 (NM_001033264) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gls2
Synonyms:	A330074B06Rik; AI195532; GA; GLS; Lga
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR221638 representing NM\_001033264  
 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCGCTCCATGAGGGCTCTGCAGAACGCGCTGAGCCGCGGGCAGCCACGGTCGCGGGGAGGCTGGG  
 GTCATCCGAGCCGGGCCCGCTTCTGGGCAGGGCGTCCGGTACTACCTCGGTGAGGCCGCGGCAGGG  
 CAGGGGGACGCCACAGCCACCAGCCGAGCACTCGGATCATGACGCCTCACACAGCGGATGCTGCCT  
 CGACTTGGTGACCTGCTTTTCTACACTATTGCAGAGGGACAGGAGCGTATCCCTATCCACAAGTTACCA  
 CGGCTCTGAAGGCCACTGGACTGCAGACGTGAGACCCACGGCTCCAGGACTGCATGAGCAAGATGCAGCG  
 CATGGTCCAAGAGTCCAGCAGCGGTGGCTCTTGGATCGAGAGCTCTTCCAAAAGTGTGTGAGCAGCAAC  
 ATTGTGCTCTGACTCAGGCATTCGAAAGAAGTTTGTATTCTGACTTTGAGGAGTTCACGGGCCATG  
 TGGATCGCATATTTGAGGATGCCAAAGAGCCACTGGAGGCAAAGTGGCAGCCTACATCCCGCACCTGGC  
 CAAATCAAACCCAGACCTTTGGGGCGTCTCCCTGTGACTGTGGATGGGCAGCGGCACTCTGTGGCCAC  
 ACGAAGATCCCCTTCTGCCTGCAGTCTGTGTCAAGCCCCTCACTTACGCCATCTCCGTGAGCACCTTAG  
 GCACTGACTACGTGCACAAGTTTGTGGCAAGGAACCCAGTGGTCTGCGCTATAACAAAACCTCCCTCAA  
 TGAGGAAGGAATCCCCATAACCCCATGGTCAATGCTGGTGCCATTGTGGTCAGCTCCCTGATCAAGATG  
 GACTGTAACAAAGCAGAGAAGTTCGATTTTGTGTACAGTATCTGAACAAGATGGCTGGGAACGAATTCA  
 TGGGGTTCAGCAATGCCACATCCAGTCAGAGAAGGAGACTGGGGATCGGAATTACGCCATCGGCTATTA  
 CCTCAAGGAGAAGAAGTCTTCCCTAAGGGTGTGGACATGATGGCTGCCCTTGATCTCTATTTCCAGCTG  
 TGCTCTGTGGAGGTTACCTGTGAGTCAGGCAGTGTGATGGCGGCCACTTGCCCAATGGCGGCATCTGCC  
 CTATCACAGGGGAGAGCGTGTGAGCGCCGAGGCCGTGCGCAACACCCTCAGCCTCATGCATTCTGTGG  
 CATGTATGACTTCTCGGGCCAGTTTGCCTTCCATGTGGGCTGCCAGCCAAGTCAGCTGTGTCAGGAGCC  
 ATCCTCCTGTTGTACCCAATGTCATGGCATGATGTGTCTGTGCGCCACCGTTAGACAAGCTGGGGAACA  
 GCCAAAGGGGCATCAACTTCTGCCAGAAGTTGGTGTCTCTTTAACTTCCACAATATGACAACCTGCG  
 GCACTGCGCTCGGAAGTTAGACCACGGAGGGAAGGAGAGGTTGGAACAAGACCGTGGTGAACCTG  
 CTATTTGCTGCATATAGTGGAGATGTCTCGCCCTTCAAGGTTTGCATTGTGCGCCATGGATATGGAGC  
 AGAAGGACTATGATTCGCGCACAGCCCTACATGTCGCTGCAGTGAAGGGCACATTGAAGTTGTCAAATT  
 TCTGATCGAGGCTTGCAAAGTGAATCCTTTTGTCAAGGACAGGTGGGGCAACATCCCCTGGACGATGCT  
 GTGCAATCAACCACCTGGAGGTGGTCAAAGTCTTCAAGATTACCATGACTCCTACTTGTCTCTGAGT  
 CTC AAGCTGAGGGCGCAGCTGAGACCCTGTCCAAGAGAATCTAGAGAGCATGGTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**ACCN:** NM\_001033264

**ORF Size:** 1806 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).

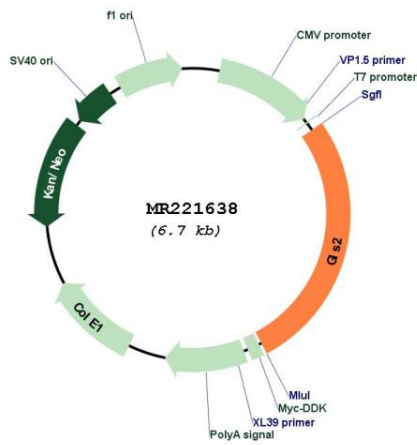
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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\\_001033264.1](#), [NM\\_001033264.2](#), [NM\\_001033264.3](#), [NP\\_001028436.2](#)

RefSeq Size: 2460 bp  
 RefSeq ORF: 1809 bp  
 Locus ID: 216456  
 UniProt ID: [Q571F8](#)  
 Cytogenetics: 10 D3  
 MW: 66.8 kDa

**Gene Summary:** Plays an important role in the regulation of glutamine catabolism. Promotes mitochondrial respiration and increases ATP generation in cells by catalyzing the synthesis of glutamate and alpha-ketoglutarate. Increases cellular anti-oxidant function via NADH and glutathione production. May play a role in preventing tumor proliferation.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR221638