

Product datasheet for **RG212650**

GLS2 (NM_013267) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GLS2 (NM_013267) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GLS2
Synonyms:	GA; GLS; hLGA; LGA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG212650 representing NM_013267
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCGCTCCATGAAGGCTCTGCAGAAGGCCTGAGCCGGGCTGGCAGTCACTGCGGGCAGGAGGCTGGG
 GTACCCGAGCCGAGCCCTCTTGGCGGGGCGTCCGGCACCACTCAGTGAGGCCGCGGCGAGGG
 CAGAGAGACGCCACACAGCCACCAGCCGACGACCAAGGATCATGATTCATCAGAAAGTGGCATGCTGTCC
 CGCCTGGGTGATTTGCTCTTTTACACTATTGCTGAAGGACAGGAACGAATCCCTATCCACAAGTTCACCA
 CTGCACTAAAGGCCACTGGACTGCAGACATCAGATCCTCGGCTCCGAGACTGCATGAGCGAGATGCACCG
 CGTGGTCCAAGAGTCCAGTAGTGGTGGCCTCTGGACCGAGATCTCTCCGAAAGTGTGTGAGCAGCAAC
 ATTGTGCTCCTGACCCAGGCATTCGAAAGAAGTTTGTATTCTGATTTTGGAGAGTTCACGGGCCATG
 TGGATCGCATCTTTGAGGATGTCAAAGAGCTCACTGGAGGCAAAGTGGCAGCCTACATCCCTCAGCTGGC
 CAAGTCAAACCCAGACCTGTGGGGTGTCTCCCTGTGACTGTGGATGGTCAACGGCACTCTGTGGGCCAC
 ACAAGATCCCCTTCTGCCTGCAGTCTGTGTGAAGCCCTCACCTATGCCATCTCCATAAGCACCCCTAG
 GCACTGACTACGTGCACAAGTTTGTGGGCAAAGAGCCAAGTGGCCTGCGCTACAACAAGCTCCTCCCTCAA
 TGAGGAAGGAATCCCCATAACCCCATGGTCAATGCTGGTGCATTGTTGTGAGTCCCTGATCAAGATG
 GACTGTAACAAAGCAGAGAAGTTTATTTTGTGTGAGTATCTCAACAAAATGGCTGGGAATGAATACA
 TGGGTTTCAGCAATGCCACATCCAGTCAGAGAAGGAAACAGGGGATCGGAATATGCCATCGGCTATTA
 TCTCAAGGAAAAGAAGTCTTCCCTAAGGGGTGGACATGATGGCTGCCCTTGTCTCTACTTCCAGCTG
 TGTCTGTGGAGTCACTTGTGAATCAGGCAGTGTATGGCAGCCACCCTCGCAACGGTGGGATCTGCC
 CCATCACAGGCGAGAGTGTGCTGAGTGTGAAGCAGTGCAGCAACACCCTCAGCCTCATGCATTCTCGCG
 CATGTATGACTTCTCTGGCCAGTTTGCCTTCCAGTGGGCTGCCAGCCAAGTCAGCTGTATCAGGAGCC
 ATCCTCCTGGTGGTACCAATGTCATGGGAATGATGTGCCTGTACCCCCATTGGACAAGCTGGGGAACA
 GCCATAGGGGGACCAGCTTCTGCCAGAAGTTGGTGTCTCTCTTCAATTTCCACAATGACAACCTGAG
 GCACTGTGCTCGGAAGTTAGACCACGGCGTGAAGGGCAGAAATTCGGAACAAGACTGTGGTCAACCTG
 TTATTTGCTGCCTATAGTGGCGATGTCTCAGCTCTTCAAGGTTTGCCTTGTGAGCCATGGATGGAAC
 AGAAAGACTATGACTCGCGCACAGCTCTGCATGTTGCTGCAGTGAAGGACACATCGAAGTTGTTAAATT
 CCTGATCGAGGCTTCAAAGTGAATCCTTTTCCAAAGGACAGGTGGGCAACATTCCTGGATGATGCT
 GTGCAGTTCAACCATCTGGAGTGGTCAAACCTGCTTCAAGATTACCAGGACTCTACACTCTCTGAAA
 CTCAGGCTGAGGCAGCAGCTGAGCCCTGTCCAAGAGAAGTCTAGAAAGCATGGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG212650 representing NM_013267
 Red=Cloning site Green=Tags(s)

MRSMKALQKALSRAGSHCRGGWGHPSRSPLLGCVRHHLSEAAAQGRETPHSHQPQHGDHDSSESGMLS
 RLGDLLFYTIAEGQERIPHFKFTALKATGLQTSDPRLRDCMSEMRVQVQESSGGLLDRDLFRKCVSSN
 IVLLTQAFRKKFVIPDFEFTGHVDRIKELTGGKVAAYIPQLAKSNPDLWGVSLCTVDGQRHVS
 TKIPFCLQSCVKPLTYAISIISTLGTDYVHKFVKGEPGLRYNKLSLNEEGIPHNPMVNAGAI
 VVSSLIKMDCNKAEKDFVLQYLNKMAGNEYMGFSNATFQSEKETGDRNYAIGYYLKEKKCFPKG
 VDMMAALDLYFQLCSVEVTCESGSVMAATLANGGICPITGESVLSAEAVRNTLSLMHSCGMYDF
 SGQFAFHVGLPAKSAVSGAILLLVVPNVMMCLSPPLDKLGNSHRGTSFCQKLVSLFNFHNYDNL
 RHCARKLDRREGAIEIRNKTVVNL LFAAYSGDVSALRRFALSAMDMEQKDYDSRTALHVA
 AAEHIEVVKFLIEACKVNPFAKDRWGNIPLDLDA VQFNHLEVVKLLQDYQDSYTLSETQAE
 AAAEALSKENLESMV

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_013267

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 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](#)

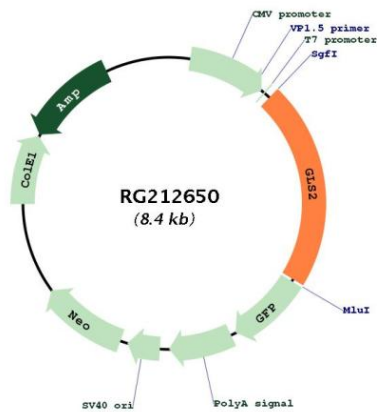
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_013267.4](#)
RefSeq Size: 2636 bp
RefSeq ORF: 1809 bp
Locus ID: 27165
UniProt ID: [Q9UI32](#)
Cytogenetics: 12q13.3
Domains: ANK, Glutaminase
Protein Pathways: Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, D-Glutamine and D-glutamate metabolism, Metabolic pathways, Nitrogen metabolism
Gene Summary: The protein encoded by this gene is a mitochondrial phosphate-activated glutaminase that catalyzes the hydrolysis of glutamine to stoichiometric amounts of glutamate and ammonia. Originally thought to be liver-specific, this protein has been found in other tissues as well. Alternative splicing results in multiple transcript variants that encode different isoforms. [provided by RefSeq, Jul 2013]

Product images:



Circular map for RG212650