

## Product datasheet for **MC218945**

### Glud1 (NM\_008133) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Glud1 (NM_008133) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Glud1
Synonyms:	A1118167; Gdh-X; Glud; Gludl
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >MC218945 representing NM\_008133  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTACCGCGTCTGGGCGAAGCGCTGCTGCTGTCCCGCGCCGGCCCGTGCCTGGGCTCTCGGGCTG  
 CAGACTCAGCCGCGCTGCTGGGCTGGGCCCGCGGACAGCCCTCCGCCGCCCGCAACCCGGGCTCAGGCC  
 GGTGCGCCCGCGCCACTACAGCGAAGCGCCGCGGACCGCGAAGACGACCCCAACTTCTTCAAGATGGTG  
 GAGGGTCTTTCGACCGCGCGCCAGCATCGTAGAGGACAAGCTGGTGAAGACCTGAAGACCCGGGAGA  
 GCGAGGAGCAGAAGCGGAACCGGTGCGCGGCATCCTGAGGATCATCAAGCCCTGCAACCATGTGTTGAG  
 CCTCTCCTTCCCATCCGGCGGACGACGGCTCCTGGGAGGTATCGAAGGCTACCGGGCCAGCACAGC  
 CAGCACCAGCCCTGCAAGGGAGGTATCCGTTACAGCACTGACGTGAGTGTGGATGAAGTAAAAGCAC  
 TGGCTTCCTTAATGACATAACAAGTGCCTGTGGTCGATGTACCGTTTGGAGGTGCTAAAGCAGCGTTAA  
 GATCAACCCCAAGAACTATACAGATAATGAATTAGAAAAAATTACACGGAGTTCACTATGGAGCTGGCC  
 AAGAAGGGTTTTATTGGTCTGGCATTGATGTGCCTGCCAGACATGAGCACGGGTGAGCGGGAGATGT  
 CCTGGATCGCTGACACCTATGCCAGCACCATAGGGCACTATGATATCAATGCGCATGCCTGTGTTACTGG  
 GAAACCCATCAGTCAAGGAGGCATCCACGGGCGCATCTCCGCTACTGGCCGGGTGTCTTCCATGGAATT  
 GAAAACCTCATCAATGAGGCTTCTTACATGAGCATTTTAGGAATGACACCAGGCTTTGGCGATAAGACAT  
 TTGTTGTTGTCAGGGATTTGGTAATGTGGGCTGCACTCTATGAGATATTTACATCGTTTTGGTGCTAAATG  
 TGTTGGTGTGGAGAGTCTGATGGGAGTATGGAATCCGGATGGGATTGACCCAAAAGAACTGGAAGAC  
 TTCAAGTTGCAACATGGATCAATTCTGGGCTTCCCAAAGCCAAGGTCTATGAAGGAAGCATCTTGGAGG  
 CTGACTGTGACATTCTGATTCTGCCGCCAGCGAGAAGCAGTTGACCAAATCCAATGCACCCAGAGTCAA  
 AGCCAAGATCATTGCTGAAGGTGCCAATGGGCCAACCCTCCAGAGGCTGATAAGATTTTCTGGAAAGA  
 AACATCATGGTTATTCGGATCTCTACTTAAATGCTGGAGGAGTAACAGTGTCTTACTTTGAGTGGCTAA  
 AGAATCTAAATCATGTCAGCTACGGCCGATTGACCTTCAAATATGAAAGGGACTCTAACTACCACTTGCT  
 CATGTCTGTTCAAGAGAGTTTAGAGAGAAAGTTTGGAAAGCATGGTGGAACTATTCCTGTGGTCCCCACA  
 GCAGAGTCCAGGACAGGATATCGGGTGCATCTGAGAAAGACATTGTGCACTCTGGCTTGGCCTACACAA  
 TGGAGAGATCTGCCAGGCAAATTATGCGCACAGCCATGAAGTATAACCTGGGATTGGACCTGAGAACAGC  
 TGCCTATGTCAATGCTATCGAGAAAGTCTTCAAGGTGTACAATGAAGCTGGTGTGACCTTACATAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul  
**ACCN:** NM\_008133  
**Insert Size:** 1677 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](#)

**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\\_008133.4](#), [NP\\_032159.1](#)

**RefSeq Size:** 3158 bp

**RefSeq ORF:** 1677 bp

**Locus ID:** 14661

**UniProt ID:** [P26443](#)

**Cytogenetics:** 14 20.8 cM

**Gene Summary:** Mitochondrial glutamate dehydrogenase that converts L-glutamate into alpha-ketoglutarate. Plays a key role in glutamine anaplerosis by producing alpha-ketoglutarate, an important intermediate in the tricarboxylic acid cycle. May be involved in learning and memory reactions by increasing the turnover of the excitatory neurotransmitter glutamate. [UniProtKB/Swiss-Prot Function]