

Product datasheet for **MR208853**

Glud1 (NM_008133) Mouse Tagged ORF Clone

Product data:

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



[View online »](#)

ORF Nucleotide Sequence:

>MR208853 representing NM_008133
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTACCGCGTCTGGGCGAAGCGCTGCTGCTGTCCCGCGCCGGCCCGTGCCTGGGCTCTCGCGCTG
 CAGACTCAGCCGCGCTGCTGGGCTGGGCGCCGCGGACAGCCCTCCGCCGCCCGCAACCCGGGCTCAGCC
 GGTGCGCCGCGGCCACTACAGCGAAGCGCCGCGGACCGCGAAGACGACCCCAACTTCTTCAAGATGGTG
 GAGGGTCTTCGACCGCGCGCCAGCATCGTAGAGGACAAGCTGGTGAAGACCTGAAGACCCGGGAGA
 GCGAGGAGCAGAAGCGGAACCGGTGCGCGGCATCCTGAGGATCATCAAGCCCTGCAACCATGTGTTGAG
 CCTCTCCTCCCATCCGGCGGACGACGGCTCCTGGGAGGTATCGAAGGCTACCGGGCCAGCACAGC
 CAGCACCCGACGCCCTGCAAGGGAGGTATCCGTTACAGCACTGACGTGAGTGGATGAAGTAAAAGCAC
 TGGCTTCCTAATGACATAACAAGTGCCTGTGGTCGATGTACCGTTGGAGGTGCTAAAGCAGCGTTAA
 GATCAACCCCAAGAACTATACAGATAATGAATTAGAAAAAATTACACGGAGTTCACTATGGAGCTGCC
 AAGAAGGGTTTTATTGGTCTGGCATTGATGTGCCTGCCAGACATGAGCACGGGTGAGCGGGAGATGT
 CCTGGATCGCTGACACCTATGCCAGCACCATAGGGCACTATGATATCAATGCGCATGCCTGTGTTACTGG
 GAAACCCATCAGTCAAGGAGGCATCCACGGGCGCATCTCCGCTACTGGCCGGGTGTCTTCCATGGAATT
 GAAAACCTCATCAATGAGGCTTCTTACATGAGCATTGAGGATGACACCCAGGCTTTGGCGATAAGACAT
 TTGTTGTTCAAGGATTTGGTAATGTGGGCTGCACTCTATGAGATATTTACATCGTTTTGGTGCTAAATG
 TGTTGGTGTGGAGAGTCTGATGGGAGTATGGAATCCGGATGGGATTGACCCAAAAGAACTGGAAGAC
 TTCAAGTTGCAACATGGATCAATTCTGGGCTCCCAAAGCCAAGGTCTATGAAGGAAGCATCTTGGAGG
 CTGACTGTGACATTCTGATTCTGCCCGCAGCAGAAGCAGTTGACCAAATCCAATGCACCCAGATCAA
 AGCCAAGATCATTGCTGAAGGTGCCAATGGGCCAACCCTCCAGAGGCTGATAAGATTTTCTGGAAAGA
 AACATCATGGTTATTCGGATCTCTACTTAAATGCTGGAGGAGTAACAGTGTCTTACTTTGAGTGGCTAA
 AGAATCTAAATCATGTCAGCTACGGCCGATTGACCTTCAAATATGAAAGGGACTCTAACTACCACTTGCT
 CATGTCTGTTCAAGAGAGTTTAGAGAGAAAAGTTTGGAAAGCATGGTGGAACTATTCCTGTGGTCCCACA
 GCAGAGTTCAGGACAGGATATCGGGTGCATCTGAGAAAGACATTGTGCACTCTGGCTTGGCCTACACAA
 TGGAGAGATCTGCCAGGCAAATTATGCGCACAGCCATGAAGTATAACCTGGGATTGGACCTGAGAACAGC
 TGCCTATGTCAATGCTATCGAGAAAGTCTCAAGGTGTACAATGAAGCTGGTGTGACCTTACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208853 representing NM_008133
 Red=Cloning site Green=Tags(s)

MYRRLGEALLSRAGPAALGSAADSALLGWARGQPSAAPQPLTPVARRHYSEAAADREDDPNFFKMV
 EGFDRGASIVEDKLVEDLKTRESEEQKRNVRGILRIKPCNHVLSLSPFIRDDGSWEVIEGYRAQHS
 QHRTPCKGGIRYSTDVSVDEVKALASLMTYKCAVVDVPPFGAKAGVKINPKNYTDNELEKITRRFTMELA
 KKGFIGPGIDVPAPDMSTGEREMSWIADTYASTIGHYDINAHACVTGKPI SQGGIHRISATGRGVFHGI
 ENFINEASYMSILGMTPGFGDKTFVVQFGNVGLHSMRYLHRFGAKCVGVGESDGSIWNPDI DPKELED
 FKLQHSILGFPKAKVYEGSILEADCDILIPAASEKQLTKSNAPRVKAKIIAEGANGPTTPEADKIFLER
 NIMVIPDLYLNAGGVTVSYFEWLKLNHVSYGRLTFKYERDSNYHLLMSVQESLERKFKHGGTIPVVPT
 AEFQDRISGASEKDIVHSLAYTMERSARQIMRTAMKYNLGLDLRTAAYVNAIEKVFKVYNEAGVTFT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9033_b07.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:

ACCN: NM_008133

ORF Size: 1674 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_008133.4, NP_032159.1](#)

RefSeq Size: 3158 bp

RefSeq ORF: 1677 bp

Locus ID: 14661

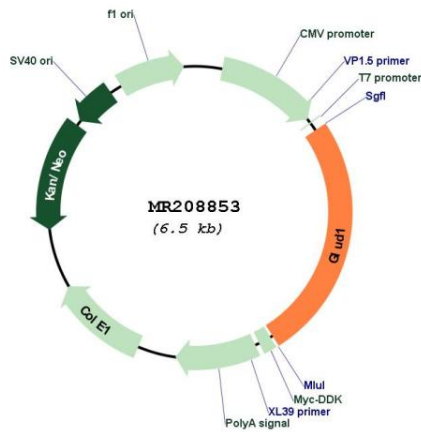
UniProt ID: [P26443](#)

Cytogenetics: 14 20.8 cM

MW: 61.8 kDa

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]

Product images:



Circular map for MR208853