

Product datasheet for **RG208737**

GLUD2 (NM_012084) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GLUD2 (NM_012084) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GLUD2
Synonyms:	GDH2; GLUDP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG208737 representing NM_012084
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTACCGCTACCTGGCCAAAGCGCTGCTGCCGTCGCCGGCCGGCCCGCTGCCCTGGGCTCCGCGGCCA
 ACCACTCGGCCGGTGTCTGGGCCGGGGCCGCGGACAGCCCGCCGCCCTCGCAGCCGGGGCTCGCATT
 GGCCGCCCGCGCCACTACAGCGAGTTGGTGGCGACCGCGAGGACGACCCCAACTTCTTCAAGATGGTG
 GAGGGCTTCTCGATCGCGGCGCCAGCATCGTGGAGGACAAGTTGGTGAAGGACCTGAGGACCCAGGAAA
 GCGAGGAGCAGAAGCGGAACCGGTGCGCGGCATCTGCGGATCATCAAGCCCTGCAACCATGTGCTGAG
 TCTCTCTTCCCATCCGGCGGACGACGGCTCCTGGGAGGTATCGAAGGCTACCGGGCCAGCACAGC
 CAGCACCCGACGCCCTGCAAGGGAGGTATCCGTTACAGCACTGATGTGAGTGTAGATGAAGTAAAAGCTT
 TGGCTTCTGATGACATAACAAGTGTGCAGTGGTTGATGTGCCGTTTGGGGTGTAAAGCTGGTGTAA
 GATCAATCCCAAGAACTATACCGAAAATGAATTGGAAGATCACAAGGAGGTTACCATGGAGCTAGCA
 AAGAAGGGCTTTATTGGTCTGGCGTTGATGTGCCTGCTCCAGACATGAACACAGGTGAGCGGGAGATGT
 CCTGGATTGCTGATACCTATGCCAGCACCATAGGGCACTATGATATTAATGCACACGCCTGTGTTACTGG
 TAAACCCATCAGCCAAGGGGGAATCCATGGACGCATCTCTGCTACTGGCCGTGGTGTCTTCCATGGGATT
 GAAAACCTCATCAATGAAGCTTCTTACATGAGCATTTTAGGAATGACACCAGGGTTTAGAGATAAAACAT
 TTGTTGTTGTCAGGGATTGGTAATGTGGGCTACACTCTATGAGATATTTACATCGTTTTGGTGCTAAATG
 TATTGCTGTTGGTGAAGTCTGATGGGAGTATATGGAATCCAGATGGTATTGACCCAAAGGAACTGGAAGAC
 TTCAAATTGCAACATGGGTCCATTCTGGGCTTCCCAAGGCAAAGCCCTATGAAGGAAGCATCTTGGAGG
 TCGACTGTGACATACTGATCCCAGCTGCCACTGAGAAGCAGTTGACCAAATCCAACGCACCCAGGAGTCAA
 AGCCAAGATCATTGCTGAAGGTCCAATGGGCCAACAACCTCCAGAAGCTGATAAGATCTTCTGGAGAGA
 AACATTTTGGTTATTCCAGATCTCTACTTGAATGCTGGAGGAGTGACAGTATCTTACTTTGAGTGGCTGA
 AGAATCTAAATCATGTCAGCTATGGCCGTTGACCTTCAAATATGAAAGGGATTCTAACTACCACTTGCT
 CCTGTCTGTTCAAGAGAGTTTAGAAAGAAAATTTGAAAGCATGGTGGAACTATTTCCATTGTACCCACG
 GCAGAGTTCCAAGACAGTATATCGGGTGCATCTGAGAAAGACATTGTGCACTCTGCCTTGGCATAACAA
 TGGAGCGTTCTGCCAGGCAAATATGCACACAGCCATGAAGTATAACCTGGGATTGGACCTGAGAACAGC
 TGCCTATGTCAATGCCATTGAAAAAGTCTTCAAAGTGTACAGTGAAGCTGGTGTGACCTTCA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG208737 representing NM_012084
 Red=Cloning site Green=Tags(s)

MYRYLAKALLPSRAGPAALGSAANHSAALLGRGRGQPAASQPGLALAARRHYSELVADREDDPNFFKMV
 EGFDRGASIVEDKLVKDLRTQESEEQKRNRVIRGILRIKPCNHVLSLSPFIRDDGSWEVIEGYRAQHS
 QHRTPCGGIRYSTDVSVEVKALASLMTYKCAVVDVPPGGAKAGVKINPKNYTENELEKITRRFTMELA
 KKGFIGPGVDVPAPDMNTGEREMSWIADTYASTIGHYDINAHACVTGKPIISQGGIHRISATGRGVFHGI
 ENFINEASYMSILGMPGFRDKTFVVQGFVNLHSMRYLHRFGAKCIAVGESDGIWNPDPGIDPKLELD
 FKLQHGSIILGFPKAKPYEGSILEVDCDILIPAATEKQLTKSNAPRVKAKIIAEGANGPTTPEADKIFLER
 NILVIPDLYLNAGGVTVSYFEWLKLNHVSYGRLTFKYERDSNYHLLLSVQESLERKFGKHGGTIPVPT
 AEFQDSISGASEKDIVHSALAYTMERSARQIMHTAMKYNLGLDLRTAAYVNAIEKVKVYSEAGVTFT

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_012084

ORF Size: 1674 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:**
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_012084.4](#)

RefSeq Size: 2348 bp

RefSeq ORF: 1677 bp

Locus ID: 2747

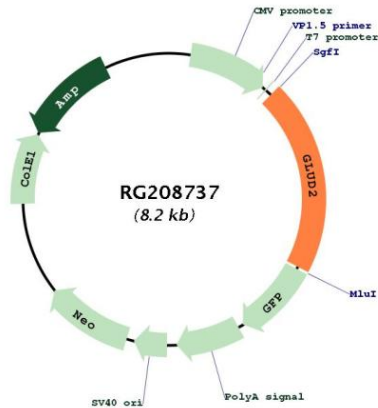
UniProt ID: [P49448](#)

Cytogenetics: Xq24

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 localized to the mitochondrion and acts as a homo-hexamer to recycle glutamate during neurotransmission. The encoded enzyme catalyzes the reversible oxidative deamination of glutamate to alpha-ketoglutarate. This gene is intronless.[provided by RefSeq, Jan 2010]

Product images:



Circular map for RG208737