

Product datasheet for RC211132L1V

OriGene Technologies, Inc.

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GLUD1 (NM_005271) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: GLUD1 (NM_005271) Human Tagged ORF Clone Lentiviral Particle

Symbol: GLUD1

Synonyms: GDH; GDH1; GLUD

Mammalian Cell

Selection:

None

Vector: pLenti-C-Myc-DDK (PS100064)

 Tag:
 Myc-DDK

 ACCN:
 NM_005271

 ORF Size:
 1674 bp

ORF Nucleotide

OTI Disclaimer:

1074 bp

Sequence:

The ORF insert of this clone is exactly the same as(RC211132).

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. <u>More info</u>

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeg: NM 005271.1

 RefSeq Size:
 3051 bp

 RefSeq ORF:
 1677 bp

 Locus ID:
 2746

 UniProt ID:
 P00367

 Cytogenetics:
 10q23.2

Domains: GLFV_dehydrog, GLFV_dehydrog_N

Protein Families: Druggable Genome





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Protein Pathways: Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, D-Glutamine

and D-glutamate metabolism, Metabolic pathways, Nitrogen metabolism

MW: 61.4 kDa

Gene Summary: This gene encodes glutamate dehydrogenase, which is a mitochondrial matrix enzyme that

catalyzes the oxidative deamination of glutamate to alpha-ketoglutarate and ammonia. This enzyme has an important role in regulating amino acid-induced insulin secretion. It is allosterically activated by ADP and inhibited by GTP and ATP. Activating mutations in this gene are a common cause of congenital hyperinsulinism. Alternative splicing of this gene results in multiple transcript variants. The related glutamate dehydrogenase 2 gene on the human X-chromosome originated from this gene via retrotransposition and encodes a soluble form of glutamate dehydrogenase. Related pseudogenes have been identified on

chromosomes 10, 18 and X. [provided by RefSeq, Jan 2016]