

## Product datasheet for **RC211132L4V**

### 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:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_005271
ORF Size:	1674 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC211132).
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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_005271.1</a>
RefSeq Size:	3051 bp
RefSeq ORF:	1677 bp
Locus ID:	2746
UniProt ID:	<a href="#">P00367</a>
Cytogenetics:	10q23.2
Domains:	GLFV_dehydrog, GLFV_dehydrog_N
Protein Families:	Druggable Genome



[View online »](#)

**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]