

## Product datasheet for **RC201784L4V**

### **QARS (QARS1) (NM\_005051) Human Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	QARS (QARS1) (NM_005051) Human Tagged ORF Clone Lentiviral Particle
Symbol:	QARS1
Synonyms:	GLNRS; MSCCA; PRO2195; QARS
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_005051
ORF Size:	2325 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC201784).
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_005051.1</a>
RefSeq Size:	2843 bp
RefSeq ORF:	2328 bp
Locus ID:	5859
UniProt ID:	<a href="#">P47897</a>
Cytogenetics:	3p21.31
Domains:	tRNA-synt_1c, tRNA_synt_1c_R2, tRNA_synt_1c_R1
Protein Families:	Druggable Genome



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**Protein Pathways:** Aminoacyl-tRNA biosynthesis, Metabolic pathways

**MW:** 87.8 kDa

**Gene Summary:** Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. In metazoans, 9 aminoacyl-tRNA synthetases specific for glutamine (gln), glutamic acid (glu), and 7 other amino acids are associated within a multienzyme complex. Although present in eukaryotes, glutaminyl-tRNA synthetase (QARS) is absent from many prokaryotes, mitochondria, and chloroplasts, in which Gln-tRNA(Gln) is formed by transamidation of the misacylated Glu-tRNA(Gln). Glutaminyl-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2013]