

Product datasheet for RC201784L4

OriGene Technologies, Inc.

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QARS (QARS1) (NM_005051) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: QARS (QARS1) (NM_005051) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: QARS1

Synonyms: GLNRS; MSCCA; PRO2195; QARS

Mammalian Cell Puromycin

Selection:

Vector:

pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

Sgfl-Mlul

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC201784).

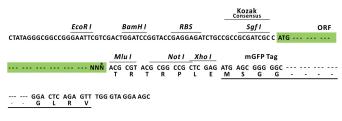
Sequence:

Restriction Sites: Cloning Scheme:

Cloning sites used for ORF Shuttling:

Sgf 1 ORF Mlu I

--- GCG ATC GCC ATG ---//--- NNN ACG CGT ---



^{*} The last codon before the Stop codon of the ORF

ACCN: NM_005051

ORF Size: 2325 bp





QARS (QARS1) (NM_005051) Human Tagged Lenti ORF Clone - RC201784L4

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: <u>NM 005051.1</u>

 RefSeq Size:
 2843 bp

 RefSeq ORF:
 2328 bp

 Locus ID:
 5859

 UniProt ID:
 P47897

Cytogenetics: 3p21.31

Domains: tRNA-synt_1c, tRNA_synt_1c_R2, tRNA_synt_1c_R1

Protein Families: Druggable Genome

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

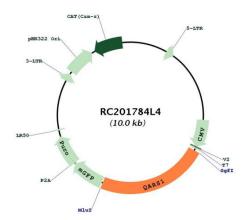
prokaryotes, mitochondria, and chloroplasts, in which Gln-tRNA(Gln) is formed by

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]



Product images:



Circular map for RC201784L4