

Product datasheet for RC202852L3

OriGene Technologies, Inc.

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GARS (GARS1) (NM_002047) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: GARS (GARS1) (NM_002047) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: GARS1

Synonyms: CMT2D; DSMAV; GARS; GlyRS; HMN5; HMN5A; SMAD1; SMAJI

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC202852).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_002047

ORF Size: 2217 bp



GARS (GARS1) (NM_002047) Human Tagged Lenti ORF Clone - RC202852L3

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 002047.2</u>

 RefSeq Size:
 2759 bp

 RefSeq ORF:
 2220 bp

 Locus ID:
 2617

 UniProt ID:
 P41250

Cytogenetics: 7p14.3

Domains: WHEP-TRS, tRNA-synt 2b, HGTP anticodon

Protein Pathways: Aminoacyl-tRNA biosynthesis

MW: 83.1 kDa

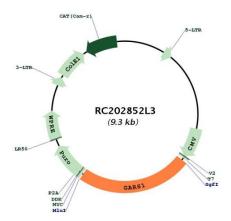
Gene Summary: This gene encodes glycyl-tRNA synthetase, one of the aminoacyl-tRNA synthetases that

charge tRNAs with their cognate amino acids. The encoded enzyme is an (alpha)2 dimer which belongs to the class II family of tRNA synthetases. It has been shown to be a target of autoantibodies in the human autoimmune diseases, polymyositis or dermatomyositis. Two transcript variants encoding different isoforms have been found for this gene. [provided by

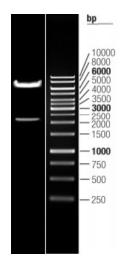
RefSeq, Oct 2015]



Product images:



Circular map for RC202852L3



Double digestion of RC202852L3 using Sgfl and Mlul $\,$