

## Product datasheet for RC203400L3

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# CARS2 (NM\_024537) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: CARS2 (NM\_024537) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

**Symbol:** CARS2

**Synonyms:** COXPD27; cysRS

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(RC203400).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_024537

ORF Size: 1692 bp





#### CARS2 (NM\_024537) Human Tagged Lenti ORF Clone - RC203400L3

**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:** NM 024537.2

RefSeq Size: 1865 bp
RefSeq ORF: 1695 bp
Locus ID: 79587
UniProt ID: Q9HA77
Cytogenetics: 13q34

**Domains:** tRNA-synt 1e

**Protein Families:** Druggable Genome

**Protein Pathways:** Aminoacyl-tRNA biosynthesis

**MW:** 62.2 kDa

**Gene Summary:** This gene encodes a putative member of the class I family of aminoacyl-tRNA synthetases.

These enzymes play a critical role in protein biosynthesis by charging tRNAs with their cognate amino acids. This protein is encoded by the nuclear genome but is likely to be

imported to the mitochondrion where it is thought to catalyze the ligation of cysteine to tRNA molecules. A splice-site mutation in this gene has been associated with a novel progressive myoclonic epilepsy disease with similar symptoms to MERRF syndrome. Alternative splicing

results in multiple transcript variants. [provided by RefSeq, Jun 2017]