

## Product datasheet for RC229299L4V

## OriGene Technologies, Inc.

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## COASY (NM\_001042532) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: COASY (NM\_001042532) Human Tagged ORF Clone Lentiviral Particle

Symbol: COASY

Synonyms: DPCK; NBIA6; NBP; PCH12; pOV-2; PPAT; UKR1

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_001042532

ORF Size: 1779 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC229299).

Sequence:
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.

**RefSeg:** NM 001042532.2

 RefSeq ORF:
 1782 bp

 Locus ID:
 80347

 UniProt ID:
 Q13057

 Cytogenetics:
 17q21.2

**Protein Pathways:** Metabolic pathways, Pantothenate and CoA biosynthesis

**MW:** 65.2 kDa







## **Gene Summary:**

Coenzyme A (CoA) functions as a carrier of acetyl and acyl groups in cells and thus plays an important role in numerous synthetic and degradative metabolic pathways in all organisms. In eukaryotes, CoA and its derivatives are also involved in membrane trafficking and signal transduction. This gene encodes the bifunctional protein coenzyme A synthase (CoAsy) which carries out the last two steps in the biosynthesis of CoA from pantothenic acid (vitamin B5). The phosphopantetheine adenylyltransferase domain of this bifunctional protein catalyzes the conversion of 4'-phosphopantetheine into dephospho-coenzyme A (dpCoA) while its dephospho-CoA kinase domain completes the final step by phosphorylating dpCoA to form CoA. Mutations in this gene are associated with neurodegeneration with brain iron accumulation (NBIA). Alternative splicing results in multiple isoforms. [provided by RefSeq, Apr 2014]