

### **Product datasheet for RC215228L4**

# OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

#### COASY (NM\_001042529) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** COASY (NM\_001042529) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: COASY

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

Mammalian Cell Puromycin

Selection:

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

Sgfl-Mlul

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC215228).

Sequence:

ce:

Restriction Sites: Cloning Scheme:





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

**ACCN:** NM\_001042529

ORF Size: 1692 bp





#### COASY (NM\_001042529) Human Tagged Lenti ORF Clone - RC215228L4

**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.

17q21.2

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 001042529.1</u>

 RefSeq Size:
 2182 bp

 RefSeq ORF:
 1695 bp

 Locus ID:
 80347

 UniProt ID:
 Q13057

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

**MW:** 62.4 kDa

Cytogenetics:

**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

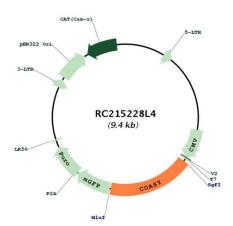
CoA. Mutations in this gene are associated with neurodegeneration with brain iron

accumulation (NBIA). Alternative splicing results in multiple isoforms. [provided by RefSeq,

Apr 2014]



## **Product images:**



Circular map for RC215228L4