

### Product datasheet for RC201545L2

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OriGene Technologies, Inc.

## ALAD (NM\_000031) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: ALAD (NM 000031) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: ALAD

Synonyms: ALADH; PBGS

Mammalian Cell None

Selection:

**Vector:** pLenti-C-mGFP (PS100071)

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

**ORF Nucleotide** 

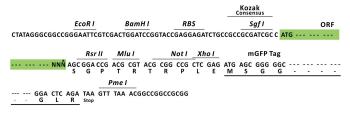
The ORF insert of this clone is exactly the same as(RC201545).

Sequence:

**Restriction Sites:** Sgfl-Rsrll

**Cloning Scheme:** 





st The last codon before the Stop codon of the ORF.

ACCN: NM\_000031

ORF Size: 1017 bp



#### ALAD (NM\_000031) Human Tagged Lenti ORF Clone - RC201545L2

**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 000031.4</u>, <u>NP 000022.2</u>

 RefSeq Size:
 3151 bp

 RefSeq ORF:
 993 bp

 Locus ID:
 210

 UniProt ID:
 P13716

Cytogenetics: 9q32

Domains: ALAD

**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Porphyrin and chlorophyll metabolism

**MW:** 37.23 kDa

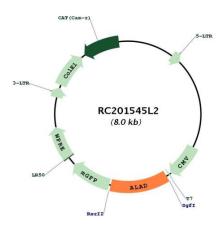
**Gene Summary:** The ALAD enzyme is composed of 8 identical subunits and catalyzes the condensation of 2

molecules of delta-aminolevulinate to form porphobilinogen (a precursor of heme,

cytochromes and other hemoproteins). ALAD catalyzes the second step in the porphyrin and heme biosynthetic pathway; zinc is essential for enzymatic activity. ALAD enzymatic activity is inhibited by lead and a defect in the ALAD structural gene can cause increased sensitivity to lead poisoning and acute hepatic porphyria. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2015]



# **Product images:**



Circular map for RC201545L2