

## **Product datasheet for RC207213L3**

## 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

OriGene Technologies, Inc.

## ALDH5A1 (NM\_001080) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: ALDH5A1 (NM\_001080) Human Tagged Lenti ORF Clone

Tag: Myc-DDK Symbol: ALDH5A1

Synonyms: SSADH; SSDH

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(RC207213).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_001080

ORF Size: 1605 bp





## ALDH5A1 (NM\_001080) Human Tagged Lenti ORF Clone - RC207213L3

**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 001080.3</u>, <u>NP 001071.1</u>

 RefSeq Size:
 5131 bp

 RefSeq ORF:
 1608 bp

 Locus ID:
 7915

 UniProt ID:
 P51649

Cytogenetics: 6p22.3

**Domains:** aldedh

**Protein Families:** Druggable Genome

Protein Pathways: Alanine, aspartate and glutamate metabolism, Butanoate metabolism, Metabolic pathways

MW: 57.21 kDa

**Gene Summary:** This protein belongs to the aldehyde dehydrogenase family of proteins. This gene encodes a

mitochondrial NAD(+)-dependent succinic semialdehyde dehydrogenase. A deficiency of this enzyme, known as 4-hydroxybutyricaciduria, is a rare inborn error in the metabolism of the neurotransmitter 4-aminobutyric acid (GABA). In response to the defect, physiologic fluids from patients accumulate GHB, a compound with numerous neuromodulatory properties. Two transcript variants encoding distinct isoforms have been identified for this gene.

[provided by RefSeq, Jul 2008]