

Product datasheet for RC217303L3

OriGene Technologies, Inc.

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ALDH5A1 (NM_170740) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: ALDH5A1 (NM 170740) 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(RC217303).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_170740

ORF Size: 1644 bp





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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.

Druggable Genome

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 170740.1</u>, <u>NP 733936.1</u>

 RefSeq Size:
 5170 bp

 RefSeq ORF:
 1647 bp

 Locus ID:
 7915

 UniProt ID:
 P51649

Cytogenetics: 6p22.3

Protein Families:

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

MW: 53.7 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]