

## Product datasheet for RC200723L1

### 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

## ALDH1A1 (NM\_000689) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: ALDH1A1 (NM 000689) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: ALDH1A1

Synonyms: ALDC; ALDH-E1; ALDH1; ALDH11; HEL-9; HEL-S-53e; HEL12; PUMB1; RALDH1

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC200723).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_000689

ORF Size: 1503 bp





#### ALDH1A1 (NM\_000689) Human Tagged Lenti ORF Clone - RC200723L1

**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 000689.3</u>

RefSeq Size: 2116 bp RefSeq ORF: 1506 bp

Locus ID: 216

UniProt ID: P00352

Cytogenetics: 9q21.13

Domains: aldedh

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS

**Protein Pathways:** Metabolic pathways, Retinol metabolism

**MW:** 54.7 kDa

**Gene Summary:** The protein encoded by this gene belongs to the aldehyde dehydrogenase family. Aldehyde

dehydrogenase is the next enzyme after alcohol dehydrogenase in the major pathway of alcohol metabolism. There are two major aldehyde dehydrogenase isozymes in the liver, cytosolic and mitochondrial, which are encoded by distinct genes, and can be distinguished by their electrophoretic mobility, kinetic properties, and subcellular localization. This gene

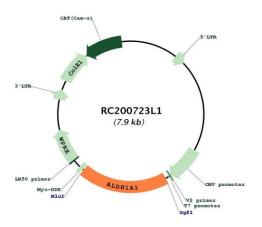
encodes the cytosolic isozyme. Studies in mice show that through its role in retinol

metabolism, this gene may also be involved in the regulation of the metabolic responses to

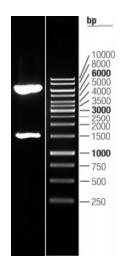
high-fat diet. [provided by RefSeq, Mar 2011]



# **Product images:**



Circular map for RC200723L1



Double digestion of RC200723L1 using Sgfl and Mlul