

Product datasheet for RC205342L3

OriGene Technologies, Inc.

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ALDH1A2 (NM_170696) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: ALDH1A2 (NM_170696) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: ALDH1A2

Synonyms: RALDH(II); RALDH2; RALDH2-T

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

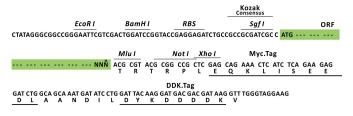
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC205342).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_170696

ORF Size: 1440 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.

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 170696.1</u>

RefSeq Size:3492 bpRefSeq ORF:1443 bpLocus ID:8854

UniProt ID: <u>O94788</u>

Cytogenetics: 15q21.3

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Retinol metabolism

MW: 53.1 kDa

Gene Summary: This protein belongs to the aldehyde dehydrogenase family of proteins. The product of this

gene is an enzyme that catalyzes the synthesis of retinoic acid (RA) from retinaldehyde. Retinoic acid, the active derivative of vitamin A (retinol), is a hormonal signaling molecule that functions in developing and adult tissues. The studies of a similar mouse gene suggest that this enzyme and the cytochrome CYP26A1, concurrently establish local embryonic retinoic acid levels which facilitate posterior organ development and prevent spina bifida. Four transcript variants encoding distinct isoforms have been identified for this gene. [provided by

RefSeq, May 2011]