

Specifications:

Gene:	<i>hALDH1A1</i>
Accession:	NP_000680.2
Insert size:	1519bp
Concentration:	10µg at 0.2µg/µL

hAldehyde Dehydrogenase 1-A1 cDNA Plasmid

**ALDH1A1 aldehyde dehydrogenase
1 family member A1 [*Homo sapiens* (human)]**

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

Summary:

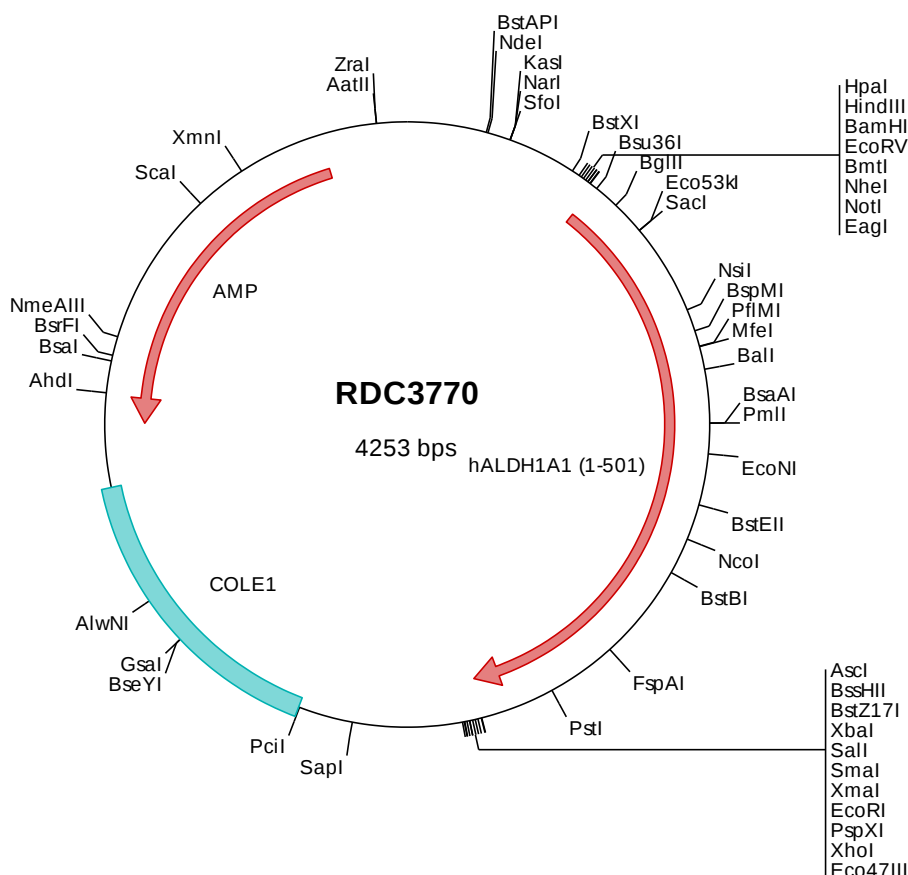
ALDH1A1 belongs to the aldehyde dehydrogenase family. Aldehyde dehydrogenase is the next enzyme after alcohol dehydrogenase in the major pathway of alcohol metabolism. There are two major aldehyde dehydrogenase isozymes in the liver, cytosolic and mitochondrial, which are encoded by distinct genes, and can be distinguished by their electrophoretic mobility, kinetic properties, and subcellular localization. ALDH1A1 is the cytosolic isozyme. Studies in mice show that through its role in retinol metabolism, ALDH1A1 may also be involved in the regulation of the metabolic responses to high-fat diet.

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.



> RDC3770 Plasmid DNA Sequence

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101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg ctttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
201  ccgcacacgat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
301  tacgccagct ggcgaaaagg ggaatgtctg caaggcgatt aagttgggta acgccagggt tttcccgatc acgacgttgt aaaacgacgg ccagtgatt
401  ggagacgtgt taacaagctt ggaatccgata tcgctagcgc ggccgcaccc atgtcatcct caggcacgco agacttacct gtctactca ccgatttgaa
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601  caggtagaag aaggagataa ggaggatgtt gacaaggcag tgaaggccgc aagacaggct tttcagattg gatctccgtg gcgtactatg gatgttccg
701  agagggggcg actattatca acagttggctg atttaactga aagagatcgt ctgtctgtgg cgacaatgga gtcaatgaat ggtgaaaaac tctattocaa
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> RDC3770 Translated Insert Sequence

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201  talhvaslik eagfppgvvn ivpgygttag aaissmhdid kvaftgstev gklikeaagk snlkrvtlel gkspcivla dadldnavef ahhgvfyhgg
301  qcciaasrif veesiydefv rrsverakky ilgnpltpgv tgppqidkeq ydkildlies gkkekaklec gggpwnkgy fvqptvfnsn tdmriakee
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501  s

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