

Product datasheet for **RC237651**

ALDH3B1 (NM_001290058) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ALDH3B1 (NM_001290058) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ALDH3B1
Synonyms: ALDH4; ALDH7
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC237651 representing NM_001290058
Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC**GGCGC**
GCCC

ATGGACCCCTTGGGGACACGCTGCGGCGACTGCGGGAGGCCCTCCACGCGGGGCGCACGGCCAGCTG
AGTTCCGGGCTGCGCAGCTCCAAGGCCTGGGCCGCTTCTGCAAGAAAACAAGCAGCTTCTGCACGACGC
ACTGGCCAGGACCTGCACAAGTCAGCCTTCGAGTCGGAGGTGTCTGAGGTTGCCATCAGCCAGGGCGAG
GTACCCTGGCCCTCAGGAACCTCCGGGCTGGATGAAGGACGAGCGTGTGCCAAAGAACCTGGCCACGC
AGCTGGACTCCGCCTTATCCGGAAGGAGCCCTTTGGCCTGGTCCTCATCATTGCCCCCTGGAACATACC
GCTGAACCTGACGCTGGTCCCCCTCGTGGGAGCCCTCGCTGCAGGGAACCTGTGTGGTGTGAAGCCATCG
GAGATTAGCAAGAACGTCGAGAAGATCCTGGCCGAGGTGCTGCCCAATACGTGGACCAGAGCTCCCCAA
ACCTGGGCCGCATCATCAACCAGAAACAGTTCAGCGGCTGCGGGCATTGCTGGGCTGCGGCCGTGTGGC
CATTGGGGCCAGAGCGATGAGAGCGATCGCTACATCGCCCCACGGTGTGGTGGATGTGCAGGAGATG
GAGCCTGTGATGCAGGAGGAGATCTTCGGGCCATCCTGCCATCGTGAACGTGCAGAGCTTGACGAGG
CCATCGAGTTCATCAACCGCGGGGAGAAGCCCTGGCCCTGTACGCCTTCTCCAACAGCAGCCAGGTGGT
CAAGCGGGTGTGACCCAGACCAGCAGCGGGGCTTCTGTGGAAACGACGGCTTCATGCACATGACCCTG
GCCAGCCTGCCTTTTGGAGGAGTGGGTGCCAGTGGGATGGGCCGGTACCATGGCAAGTTCCTCTCGACA
CCTTCTCCACCATCGCGCCTGCCTCCTGCGCAGCCCGGGATGGAGAAGCTCAACGCCCTCCGCTACCC
GCCGCAATCGCCGCGCCCTGAGGATGCTGCTGGTGGCCATGGAGGCCAAGGCTGCAGCTGCACACTG
CTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC237651 representing NM_001290058
 Red=Cloning site Green=Tags(s)

MDPLGDTLRRLEAFHAGRTRPAEFRAAQLQGLGRFLQENKQLLHDALAQDLHKSFAFESEVSEVAISQGE
 VTLALRNLRAWMKDERVPKNLATQLDSAFIRKEPFGVLIIAPWNYPLNLTLPVPLVGALAAGNCVVLKPS
 EISKVVEKILAEVLPQYVDQSSPNLGRINQKQFQRLRALLGCGRVAIGGQSDSDRYIAPTVLVDVQEM
 EPVMQEEIFGPILPIVNVQSLDEAIEF INRREKPLALYAF SNSSQVVKRVL TQTSSGGFCGNDGFMHMTL
 ASLPFGGVGASGMGRYHGKF SFDTF SHHRACLLRSPGMEKLNALRYPPQSPRRLRMLLVAMEAQGCSTL
 L

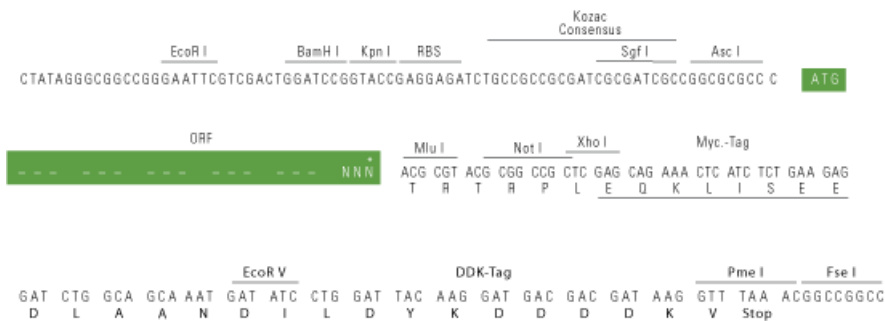
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

AscI-MluI

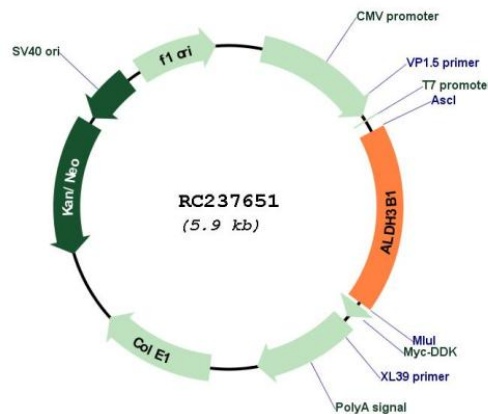
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001290058

ORF Size:	1053 bp
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:	<ol style="list-style-type: none">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:	NM_001290058.2
RefSeq Size:	2505 bp
RefSeq ORF:	1056 bp
Locus ID:	221
UniProt ID:	P43353
Cytogenetics:	11q13.2
Protein Families:	Druggable Genome
Protein Pathways:	Drug metabolism - cytochrome P450, Glycolysis / Gluconeogenesis, Histidine metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Phenylalanine metabolism, Tyrosine metabolism
MW:	39.3 kDa
Gene Summary:	This gene encodes a member of the aldehyde dehydrogenase protein family. Aldehyde dehydrogenases are a family of isozymes that may play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. The encoded protein is able to oxidize long-chain fatty aldehydes in vitro, and may play a role in protection from oxidative stress. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]