

## Product datasheet for **RC237071**

### **ALDH3B1 (NM\_001290059) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** ALDH3B1 (NM\_001290059) 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:** >RC237071 representing NM\_001290059  
**Red=Cloning site Blue=ORF Green=Tags(s)**

CTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC**GGCGC**  
**GCCC**

ATGACTGCTGCCCAAGCACCTGACACCTGTACCCTGGAGCTGGGGGGCAAGAACCCTTGCTACGTGG  
ACGACAACCTGCGACCCCCAGACCGTGGCCAACCGCTGGCCTGGTTCCGCTACTTCAACGCCGGCCAGAC  
CTGCGTGGCCCCGACTACGTCCTATGCAGCCCTGAGATGCAGGAGAGGCTGCTGCTGCCCTGCAGAGC  
ACCATCACCCGTTTCTATGGCGACGACCCCCAGAGCTCCCCAAACCTGGGCCGCATCATCAACCAGAAAC  
AGTTCCAGCGGCTGCGGGCATTGCTGGGCTGCGGCCGTGTGGCCATTGGGGGCCAGAGCGATGAGAGCGA  
TCGCTACATCGCCCCACGGTGTGCTGGTGGATGTGCAGGAGATGGAGCCTGTGATGCAGGAGGAGATCTTC  
GGGCCATCCTGCCCATCGTGAACGTGCAGAGCTTGGACGAGGCCATCGAGTTCATCAACCGCGGGGAGA  
AGCCCCGGCCCTGTACGCCTTCTCAAACAGCAGCCAGGTGGTCAAGCGGGTGTGACCCAGACCAGCAG  
CGGGGGCTTCTGTGGGAACGACGGCTTCATGCACATGACCCTGGCCAGCCTGCCTTTTGGAGGAGTGGGT  
GCCAGTGGGATGGGCCGGTACCATGGCAAGTTCCTTCGACACCTTCTCCACCATCGCGCCTGCCTCC  
TGCGCAGCCCGGGGATGGAGAAGCTCAACGCCCTCCGCTACCCGCCGAATCGCCGCGCCGCTGAGGAT  
GCTGCTGGTGGCCATGGAGGCCAAGGCTGCAGCTGCACACTGCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC237071 representing NM\_001290059  
 Red=Cloning site Green=Tags(s)

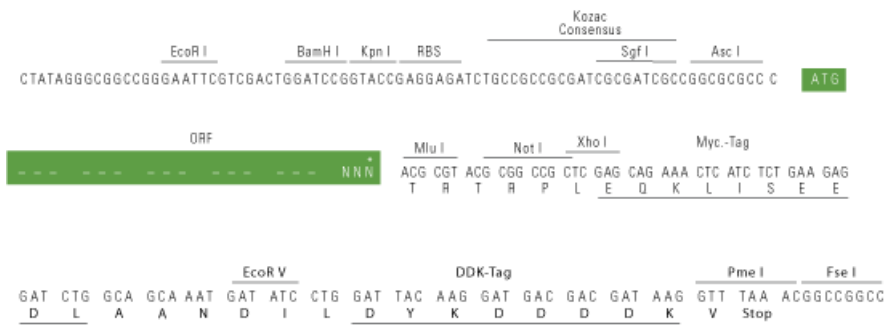
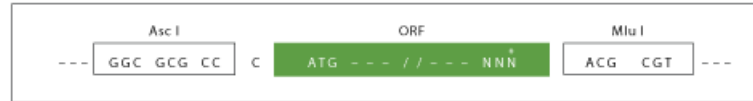
MTAAAKHLTPVTLELGGKNPCYVDDNCDPQTVANRVAVFRYFNAGQTCVAPDYVLCSPEMQERLLPALQS  
 TITRFYGDPPQSSPNLGRINQKQFQRLRALLGCGRVAIGGQSDSDRYIAPTVLVDVQEMEPVMQEEIF  
 GPILPIVNVQSLDEAIEF INRREKPLAL YAFSNSQVVKRVL TQTSSGGFCGNDGFMHMTLASLPGGGV  
 ASGMGRYHGKFSFDTF SHHRACLLRSPGMEKLNALRYPPQSPRRLRMLLVAMEAQGCSTLL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** AscI-MluI

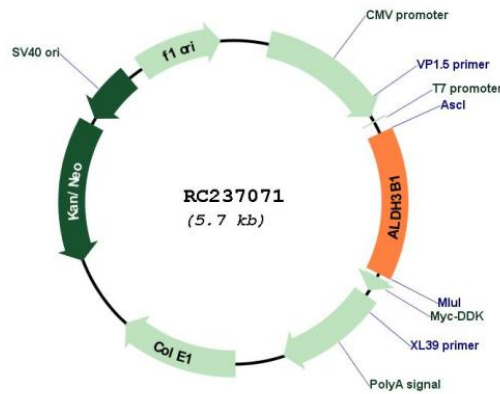
**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**



**ACCN:** NM\_001290059

**ORF Size:** 816 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001290059.2</a>
<b>RefSeq Size:</b>	2774 bp
<b>RefSeq ORF:</b>	819 bp
<b>Locus ID:</b>	221
<b>UniProt ID:</b>	<a href="#">P43353</a>
<b>Cytogenetics:</b>	11q13.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Drug metabolism - cytochrome P450, Glycolysis / Gluconeogenesis, Histidine metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Phenylalanine metabolism, Tyrosine metabolism
<b>MW:</b>	30.5 kDa
<b>Gene Summary:</b>	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]