

Product datasheet for **RC228913**

ALDH3B1 (NM_001161473) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALDH3B1 (NM_001161473) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ALDH3B1
Synonyms:	ALDH4; ALDH7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC228913 representing NM_001161473
 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC
 GCCC

ATGGACCCCTTGGGACACGCTGCGGCGACTGCGGGAGGCCCTCCACGCGGGGCGCACGCGGCCAGCTG
 AGTTCCGGGCTGCGCAGCTCCAAGGCCTGGGCCGCTTCTGCAAGAAAACAAGCAGCTTCTGCACGACGC
 ACTGGCCAGGACCTGCACAAGTCAGCCTTCGAGTCGGAGGTGTCTGAGGTTGCCATCAGCCAGGGCGAG
 GTCACCCTGGCCCTCAGGAACCTCCGGGCTGGATGAAGGACGAGCGTGTGCCAAGAACCTGGCCACGC
 AGCTGGACTCCGCTTCCGGAAGGAGCCCTTGGCCCTGCTCATCATTGCGCCCTGGAACATCC
 GCTGAACCTGACGCTGGTCCCTCGTGGGAGCCCTCGCTGCAGGAACTGTGTGGTGTGAAGCCATCG
 GAGATTAGCAAGAACGTCGAGAAGATCTGGCCGAGGTGTGCCCAATACGTGGACCAGAGCTGCTTTG
 CTGTGGTGTGGCGGGCCAGGAGACGGGCGAGCTGTAGAGCACAGGTTGACTACATCTTCTTCCAC
 AGGGAGCCCTCGTGTGGCAAGATTGTTATGACTGCTGCCGCAAGCACCTGACACCTGTACCCTGGAG
 CTGGGGGCAAGAACCCTTGTACGTGGACGACAACCTGCCACCCAGACCGTGGCAACCCTGGCCCT
 GGTTCGCTACTTCAACGCCGGCCAGACCTGCGTGGCCCCGACTACGTCTATGACGCCCTGAGATGCA
 GGAGAGGCTGCTGCTGCCCTGCAGAGCACCATCACCCGTTTCTATGGCGACGACCCCGAGACTCCCA
 AACCTGGGCCGCATCATCAACCAGAAACAGTTCACGCGGCTGCGGGCATTGCTGGGCTGCGGCCGTGG
 CCATTGGGGGCCAGAGCGATGAGAGCGATCGCTACATCGCCCCACGGTGTGGTGGATGTGAGGAGAT
 GGAGCCTGTGATGAGGAGGAGATCTTCGGGCCATCTGCCATCGTGAACGTGACAGCTTGGACGAG
 GCCATCGAGTTCATCAACCGCGGGAGAAGCCCTGGCCCTGTACGCTTCTCCAACAGCAGCCAGGTGG
 TCAAGCGGGTGTGACCCAGACCAGCAGCGGGGGCTTCTGTGGGAACGACGGCTTCATGCACATGACCCT
 GGCCAGCCTGCCTTTGGAGGAGTGGGTGCCAGTGGGATGGGCCGTACCATGGCAAGTTCTCCTCGAC
 ACCTTCTCCACCATCGCGCCTGCTCCTGCGCAGCCCGGGATGGAGAAGCTCAACGCCCTCCGCTACC
 CGCCGCAATCGCCGCGCCGCTGAGGATGCTGCTGGTGGCCATGGAGGCCAAGGCTGCAGCTGCACACT
 GCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC228913 representing NM_001161473
 Red=Cloning site Green=Tags(s)

MDPLGDTLRRLEAFHAGRTRPAEFRAAQLQGLGRFLQENKQLLHDLAQLHKSFAFESEVSEVAISQGE
 VTLALRNLRAWMKDERVPKNLATQLDSAFIRKEPFLVLIAPWNYPLNLTLPVPLVLAGAAGNCVVLKPS
 EISKVNEKILAEVLPQYVDQSCFAVVLGGPQETGQLEHRFDYIFFTGSPRVGKIVMTAAAKHLTPVTLE
 LGGKNPCYVDDNCDPQTVANRVAWFRYFNAGQTCVAPDYVLCSPEMQERLLPALQSTITRFYGGDDPQSSP
 NLGRIINQKQFQRLRALLGCGRVAIGGQSDSDRYIAPTIVLDVQEMEPVMQEEIFGPILPIVNVQSLDE
 AIEFINRREKPLALYAFSNSSQVVKRVLQTSSGGFCGNDGFMHMTLASLPFGGASGMGRYHGKFSFD
 TFSHHRACLLRSPGMEKLNALRYPPQSPRRLRMLLVAMEAQGCSTLL

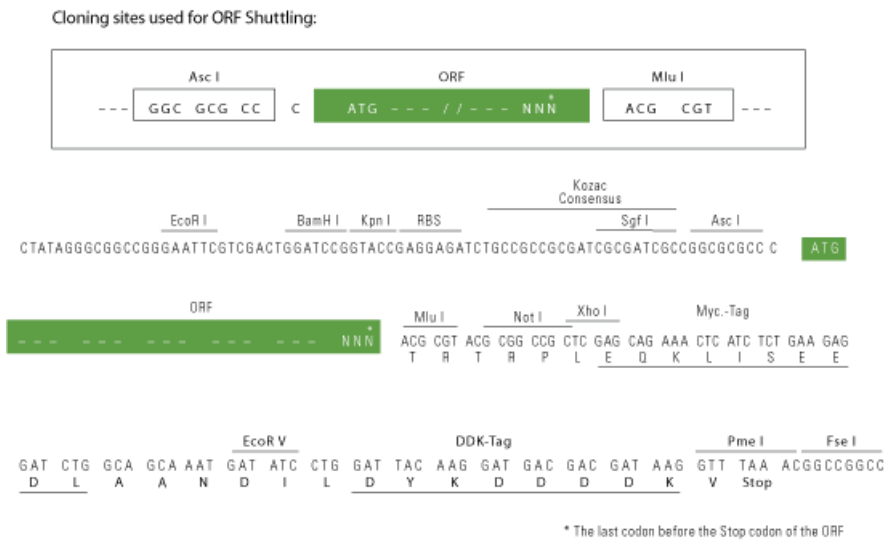
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja2082_a01.zip

Restriction Sites:

Ascl-MluI

Cloning Scheme:


ACCN: NM_001161473

ORF Size: 1404 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:

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_001161473.3](#)

RefSeq Size: 2899 bp

RefSeq ORF: 1407 bp

Locus ID: 221

UniProt ID: [P43353](#)

Cytogenetics: 11q13.2

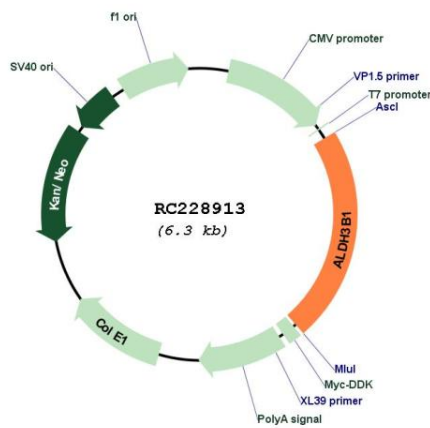
Protein Families: Druggable Genome

Protein Pathways: Drug metabolism - cytochrome P450, Glycolysis / Gluconeogenesis, Histidine metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Phenylalanine metabolism, Tyrosine metabolism

MW: 52.3 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]

Product images:



Circular map for RC228913