

Product datasheet for **RC227026**

ALDH16A1 (NM_001145396) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALDH16A1 (NM_001145396) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ALDH16A1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC227026 representing NM_001145396
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCTGCGACGCGTGCAGGGCCCCGCGCCCGAGATCTTACCTCGCTGGAGTACGGACCGGTGCCGG
 AGAGCCACGCATGCGCACTGGCCTGGCTGGACACCCAGGACCGGTGCTTGGGCCACTATGTGAATGGGAA
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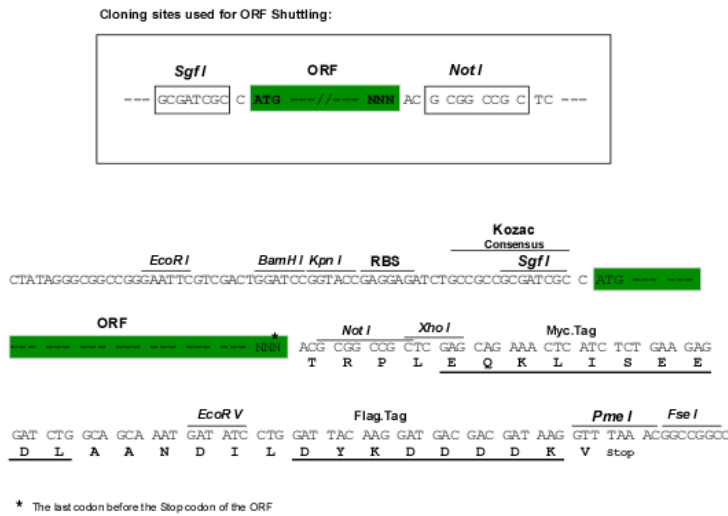
Protein Sequence: >RC227026 representing NM_001145396
 Red=Cloning site Green=Tags(s)

MAATRAGPRAREIFTSLEYGPVPESHACALAWLDTQDRCLGHYVNGKWLKPEHRNSVPCQDPITGENLAS
 CLQAQAEVDAAAVEAARMAFKGWSAHPGVVRAQHLTRLAEVIQKHQRLWLTLESLVTGRAVREVRDGDVQ
 LAQQLLHYHAIQASTQEEALAGWEPMGVIGLILPPTFSFLEMMWRICPALAVGCTVVALVPPASPAPLLL
 AQLAGELGPFPGILNLVSGPASLVPILASQPGIRKVAFCGAPEGLRLLIQESVWDEAMRRLQERMGRRL
 SGRGLDGAVDMGARGAAACDLVQRVREASQGAQVFQAGDVPSEPFYPPTLVSNLPPASPCAQVEVPW
 PVVVASPFRTAKEALLVANGTPRGGSASVWSERLGQALELGYGLQVGTWVINAHLRDPVPTGGCKESG
 CSWHGGPDGLYEYLRPSGTPARLSCLSKNLNYDTFGLAVPSTLPAGPEIGPSPAPPYGLFVGGRFQAPGA
 RSSRPIRDSSGNLHGVAEGGAKDIRGAVEAAHQAFPGWAGQSPGARAALLWALAAALERRKSTLASRLE
 RQGAELKAAAEVELSARRLRAWGARVQAQGHTLQVAGLRGPVLRRLREPLGVLAVVCPDEWPLLAFLVSL
 APALAYGNTVMVPSAACPLLALEVCQDMATVFPAGLANVVTGDRDHLTRCLALHQDVQAMWYFSAQGS
 QFVEWASAGNLKPVWASRGCPRAWDQEAEGAGPELGLRVARTKALWLPMD

TRRLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-NotI

Cloning Scheme:



ACCN: NM_001145396

ORF Size: 2253 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_001145396.2](#)

RefSeq ORF: 2256 bp

Locus ID: 126133

UniProt ID: [Q8IZ83](#)

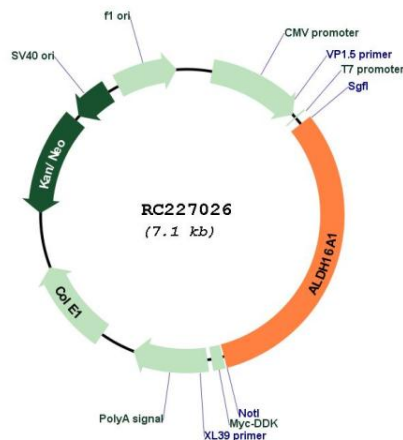
Cytogenetics: 19q13.33

Protein Families: Druggable Genome

MW: 79.7 kDa

Gene Summary: This gene encodes a member of the aldehyde dehydrogenase superfamily. The family members act on aldehyde substrates and use nicotinamide adenine dinucleotide phosphate (NADP) as a cofactor. This gene is conserved in chimpanzee, dog, cow, mouse, rat, and zebrafish. The protein encoded by this gene interacts with maspardin, a protein that when truncated is responsible for Mast syndrome. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2010]

Product images:



Circular map for RC227026