

Product datasheet for **RR215183**

Aldh1a1 (NM_022407) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aldh1a1 (NM_022407) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aldh1a1
Synonyms:	Ahd2; Aldh1; Aldh2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RR215183 representing NM_022407
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCTTCCCCTGCACAGCCTGCAGTTCCTGCCCACTGGCCAATTGAAGATTCAACACACCAAGATCT
 TCATAAACAATGAATGGCATGATTCAAGTGGCAAGAAATTTCTGTCCTTAACCTGCAACTGAGGA
 GGTCACTGCCATGTGGAAGAAGGGGACAGGCAGATGTTGACAAAGCTGTGAAGCCGCAAGACAGGCT
 TTCCAGATTGGCTCCCCATGGCGCACCATGGATGCTTCAGAGAGAGGACGCTTGCTGAACAAGCTGGCTG
 ACTTAATGGAGAGAGATCGTCTGCTGCTGGCTACAATAGAGGCCATCAATGGTGGGAAAGCTTTGCCAA
 TGCGTACTTGTGCGATTTAGGAGGCAGCATAAAAGCATTAAAGTACTGTGCAGGCTGGGCTGACAAGATC
 CATGGTCAAACAATACCGAGTGATGGAGACATTTTCACTTTTACGAGACGTGAACCTATTGGGGTGTGTG
 GCCAAATCATCCCTTGAATTTTCCACTGCTTATGTTTCAATTTGGAAGATAGGCCCTGCCCTCAGCTGTGG
 GAACACGGTGGTGTCAAGCCAGCAGAGCAAACCTCTCACTGCTCTTACATGGCATCTTTAATAAAA
 GAGGCAGGGTTTCTCCTGGCGTGGTGAACATTGTCCTGGTTATGGGCCAACTCGCGGGGACGCGATCT
 CCTCTCATGGATGTGGACAAGGTGGCCTTACGGGATCAACCCAGGTTGGCAAATTAATCAAGGAAGC
 TGCAGGAAAAAGCAATCTGAAGAGGGTCAAGCTGGAGCTTGGGGAAAGAGCCCTTGCAATGTGTTTGCA
 GATGCCGACTTGGACATTGCTGTGAGTTTGCACACCATGGAGTCTTACCATCAAGGCCAATGCTGCG
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 GCTGGGGGAACAAGGCTTCTTTGTCCAGCCACAGTCTTCCAATGTGACCGATGAGATGCGCATTC
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 GCAAACAATACTACCTATGGTCTAGCAGCAGGAGTCTTCAAAAAGACCTGGACAGGGCCATCACTGTGT
 CTTCTGCTCTGCAGGCCGGGTAGTGTGGGTTAACTGCTATATGATCTTGTGAGCCAGTCCCCCTCGG
 TGGATTCAAGATGTCTGGAAATGGACGAGAAGTGGGTGAACATGGTCTTTATGAGTACACTGAGCTCAAG
 ACAGTTGCAATGAAAATATCTCAGAAGAACTCCACAGTTGCAATGAAAATATCTCAGAAGAACTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR215183 representing NM_022407
 Red=Cloning site Green=Tags(s)

MSSPAQPAVPAPLANLKIQHTKIFINNEWHDSVSGKKFPVLPATEEVIHVVEEGDKADVDAVKAARQA
 FQIGSPWRTMDASERGRLLNLADLMERDRLLLATIEAINGGKVFANAYLSDLGGSIKALKYCAGWADKI
 HGQTIPSDGDIFFTRREPIGVCGQIIPWNFPLLMFIWKIGPALSCGNTVVVKPAEQTPLTALHMASLIK
 EAGFPVGVNIVPGYGPTAGAAISSHMDVDKVAFTGSTQVVKL I KEAAGKSNLKRVTLELGGKSPCIVFA
 DADLDIAVEFAHHGVFYHQGCCVAASRIFVEESVYDEFVRKSVERAKKYVLGNPLTQGINQGPQIDKEQ
 HDKILDLESKKEGAKLECGGGRWGNKGFFVQPTVFSNVTDEMRIAKEEIFGPVQQIMKFKSIDDVIKR
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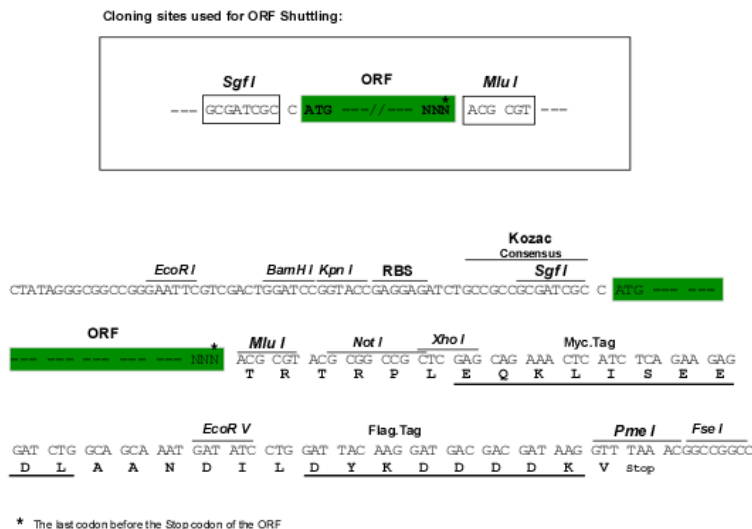
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja1407_c03.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_022407

ORF Size: 1503 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 Size: 2095 bp

RefSeq ORF: 1506 bp

Locus ID: 24188

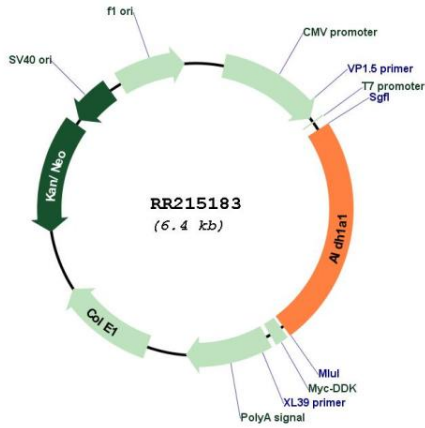
UniProt ID: [P51647](#)

Cytogenetics: 1q51

MW: 54.5 kDa

Gene Summary: ubiquitous enzyme located in virtually all mammalian tissues; catalyzes oxidation of aldehyde substrates to carboxylic acids; detoxifies ethanol-derived acetaldehyde [RGD, Feb 2006]

Product images:



Circular map for RR215183