

## Product datasheet for **MR208315**

### **Aldh2 (NM\_009656) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Aldh2 (NM_009656) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aldh2
Synonyms:	Ahd-5; AHD-M1; Ahd5; ALDH-E2; ALDHI
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>MR208315 representing NM\_009656  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTGCGCGCCGCACTACCACTGTCCGCCGCGACCGCGCCTGAGCCGCTGTGTCCGCCGCCCA  
 CCAGCGCGGTGCCAGCCCCAACCATCAGCCTGAGGTCTTCTGCAACCAGATCTTCATTAACAATGAGTG  
 GCACGACGCCGTAGCAGGAAAACATTTCCACCGTCAACCCCTCCACAGGGGAGGTCATCTGCCAGGTG  
 GCCGAAGGGAACAAGGAGGACGTAGACAAGGCAGTGAAGGCTGCTCGTGCAGCCTTCCAGCTGGGCTCGC  
 CCTGGCGCCGATGGATGCATCTGACCGGGGCCGGCTGTTGTACCGATTGGCGGATCTCATTGAACGGGA  
 CCGGACCTACCTAGCGGCCTTGGAGACCCTGGACAACGGCAAGCCTTATGTCATCTCGTACCTGGTGGAT  
 TTGGACATGGTCTGAAATGTCTCCGCTATTACGCTGGCTGGGCTGACAAGTACCATGGGAAAACATTC  
 CCATCGACGGCGACTTCTCAGCTATACCCGCCATGAGCCTGTGGCGTGTGTGGACAGATCATTCCGTG  
 GAACCTCCCGCTCCTGATGCAAGCATGGAACTGGGCCAGCCCTGGCAACCGGGAACGTGGTGGTGATG  
 AAGGTGGCCGAGCAGACCCGCTCACCGCGCTCTACGTGGCAACTTGATCAAGGAGGCAGGCTTTCCCC  
 CTGGCGTGGTCAATATCGTTCCCGGATTCGGCCCTACCGCCGGGGCTGCCATCGCATCCCATGAGGGTGT  
 GGACAAAGTGGCGTTCACAGGCTCCACGGAGGTTGGTCACTAATCCAGGTGGCCGCCGGGAGCAGCAAC  
 CTCAAGAGAGTAACCTGGAGCTGGGGGAAAGAGTCCCAACATCATGTCCGACGCTGACATGGACT  
 GGGCTGTGGAGCAGGCCACTTTGCCCTGTTCTTCAACAGGGCCAGTGTCTGCGCAGGCTCCCGGAC  
 CTTCTGTGACGAGAAATGTGTATGACGAATTCGTGGAACGACGCGTGGCTCGGGCAAGTCTCGGGTGGT  
 GGAACCCCTTCGACAGCCGACGGAGCAGGGCCCTCAGGTGGATGAAACTCAGTTAAGAAGATCTCG  
 GCTACATCAAATCGGACAACAAGAAGGGGCGAAGCTGCTGTGTGGTGGGGCGCTGCCGGGACCGTGG  
 CTACTTTATCCAGCCCACCGTGTTCGGGGACGTAAAAGACGGCATGACCATTGCCAAGGAGGAGATCTTT  
 GGACAGTGATGCAAATCCTCAAATTAAGACCATCGAGGAGGTTGTGGGCGGGCAATGATTCTAAGT  
 ATGGGCTGGCAGCCGCCCTTTCACAAAGGACCTGGATAAAGCCAATTACCTGTCCCAAGCTCTGCAGGC  
 TGGCACTGTGTGGATCAACTGCTACGATGTGTTTGGGGCCAGTCTCCATTTGGGGGCTATAAGATGTCA  
 GGGAGTGGCAGGGAGCTGGGCGAGTATGGCCTGCAGGCGTACACAGAAGTGAAGACGGTACTGTCAAAG  
 TGCCACAGAAGAACTCG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR208315 representing NM\_009656  
 Red=Cloning site Green=Tags(s)

MLRAALTTVRRGPRLSRLLSAAATSAPVAPNHQPEVFCNQIFINNEWHDAVSRKTFPTVNPSTGEVICQV  
 AEGNKEDVDKAVKAARAQFLGSPWRRMDASDRGRLLYRLADLIERDRTYLAALETLDNGKPYVISYLV  
 LDMVLKCLRYAGWADKYHGKTIPIIDGDFFSYTRHEPVGVCQIIPWNFPLLMQAWKLGALATGNVVM  
 KVAEQTPLTALYVANLIEAGFPPGVVNIIVPGFPTAGAAIASHEGVDKVAFTGSTEVGHLIQVAAGSSN  
 LKRVTLELGGKSPNIIMSDADMWAVEQAHLFFFNQGCCAGSRTFVQENVYDEFVRSVARAKSRV  
 GNPFDSTRTEQGPQVDETQFKKILGYIKSGQEQEGAKLLCGGAAADRGYFIQPTVFGDVKDGMTIAKEEIF  
 GPVMQILKFKTIEEVVGRANDSKYGLAAAVFTKDLDKANYLSQALQAGTVWVINCVDVFGAQSPFGGYKMS  
 GSGRELGEYGLQAYTEVKTVTVKVPQKNS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9074\\_h08.zip](https://cdn.origene.com/chromatograms/mm9074_h08.zip)

**Restriction Sites:**

SgfI-MluI

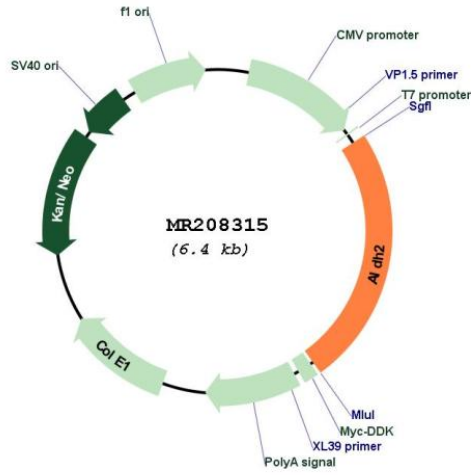
**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**Plasmid Map:**



ACCN:

NM\_009656

<b>ORF Size:</b>	1557 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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></p>
<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_009656.4</a> , <a href="#">NP_033786.1</a>
<b>RefSeq Size:</b>	3883 bp
<b>RefSeq ORF:</b>	1560 bp
<b>Locus ID:</b>	11669
<b>UniProt ID:</b>	<a href="#">P47738</a>
<b>Cytogenetics:</b>	5 F
<b>MW:</b>	56.5 kDa
<b>Gene Summary:</b>	Is capable of converting retinaldehyde to retinoic acid.[UniProtKB/Swiss-Prot Function]