

## Product datasheet for **MG208315**

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

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Aldh2 (NM_009656) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Aldh2
Synonyms:	Ahd-5; AHD-M1; Ahd5; ALDH-E2; ALDHI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG208315 representing NM\_009656  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTGCGCGCCGCACTACCACTGTCCGCGCGGACCGCGCCTGAGCCGCTGTGTCCGCGCCGCCA  
 CCAGCGCGGTGCCAGCCCCAACCATCAGCCTGAGGTCTTCTGCAACCAGATCTTCATTAACAATGAGTG  
 GCACGACGCCGTGAGCAGGAAAACATTTCCACCGTCAACCCCTCCACAGGGGAGGTCATCTGCCAGGTG  
 GCCGAAGGGAACAAGGAGGACGTAGACAAGGCAGTGAAGGCTGCTCGTGCAGCCTTCCAGCTGGGCTCGC  
 CCTGGCGCCGATGGATGCATCTGACCGGGGCCGGCTGTTGTACCGATTGGCGGATCTCATTGAACGGGA  
 CCGGACCTACCTAGCGGCCTTGGAGACCCTGGACAACGGCAAGCCTTATGTCATCTCGTACCTGGTGGAT  
 TTGGACATGGTCTGAAATGTCTCCGCTATTACGCTGGCTGGGCTGACAAGTACCATGGGAAAACCATTC  
 CCATCGACGGCGACTTCTCAGCTATACCCGCCATGAGCCTGTGGCGTGTGTGGACAGATCATTCCGTG  
 GAACCTCCCGCTCCTGATGCAAGCATGGAAGTGGGCCAGCCCTGGCAACCGGGAACGTGGTGGTGGATG  
 AAGGTGGCCGAGCAGACCCGCTCACCGCGCTCTACGTGGCAACTTGATCAAGGAGGCAGGCTTTCCCC  
 CTGGCGTGGTCAATATCGTTCCCGGATTCGGCCCTACCGCCGGGGCTGCCATCGCATCCCATGAGGGTGT  
 GGACAAAGTGGCGTTCACAGGCTCCACGGAGGTTGGTACCTAATCCAGGTGGCCGCCGGGAGCAGCAAC  
 CTCAAGAGAGTAAACCCTGGAGCTGGGGGAAAGAGTCCCAACATCATGTCCGACGCTGACATGGACT  
 GGGCTGTGGAGCAGGCCACTTTGCCCTGTTCTTCAACCAGGGCCAGTGTCTGCGCAGGCTCCCGGAC  
 CTTCTGTCAGGAGAATGTGTATGACGAATTCGTGGAACGCAGCGTGGCTCGGGCAAGTCTCGGGTGGT  
 GGAACCCCTTCGACAGCCGACGGAGCAGGGCCCTCAGGTGGATGAAACTCAGTTAAGAAGATCCTCG  
 GCTACATCAAATCGGACAACAAGAAGGGCGAAGCTGCTGTGTGGTGGGGCGCTGCCGCGGACCGTGG  
 CTACTTTATCCAGCCCACCGTGTTCGGGGACGTAAAAGACGGCATGACCATTGCCAAGGAGGAGATCTTT  
 GGACAGTGATGCAAATCCTCAAATTAAGACCATCGAGGAGGTTGTGGGCGGGCCAATGATTCTAAGT  
 ATGGGCTGGCAGCCGCCCTTTCACAAAGGACCTGGATAAAGCCAATTACCTGTCCCAAGCTCTGCAGGC  
 TGGCACTGTGTGGATCAACTGCTACGATGTGTTTGGGGCCAGTCTCCATTTGGGGGCTATAAGATGTCA  
 GGGAGTGGCAGGGAGCTGGGCGAGTATGGCCTGCAGGCGTACACAGAAGTGAAGACGGTACTGTCAAAG  
 TGCCACAGAAGAACTCG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG208315 representing NM\_009656  
 Red=Cloning site Green=Tags(s)

MLRAALTTVRRGPRLSRLLSAAATSAVPAPNHQPEVFCNQIFINNEWHDAVSRKTFPTVNPSTGEVICQV  
 AEGNKEDVDKAVKAARAFAQLGSPWRRMDASDRGRLLYRLADLIERDRTYLAALETLDNGKPYVISYLV  
 LDMVLKCLRYAGWADKYHGKTIPIIDGDFSYTRHEPVGVCGQIIPWNFPLLMQAWKLGALATGNVVMM  
 KVAEQPTLALYVANLIKEAGFPVGVNIIVPGFGPTAGAAIASHEGVDKVAFTGSTEVGHLIQVAAGSSN  
 LKRVTLELGGKSPNIIMSDADMWAVEQAHFALFFNQGCCAGSRTFVQENVYDEFVRSVARAKSRV  
 GNPFDSTRTEQGPQVDETQFKKILGYIKSGQEQGAKLLCGGAAADRGYFIQPTVFGVDKGMTIAKEEIF  
 GPVMQILKFKTIEEVVGRANDSKYGLAAAVFTKDLKANYLSQALQAGTVWVINCVDVFGAQSPFGGYKMS  
 GSGRELGEYGLQAYTEVKTVTVPQKNS

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

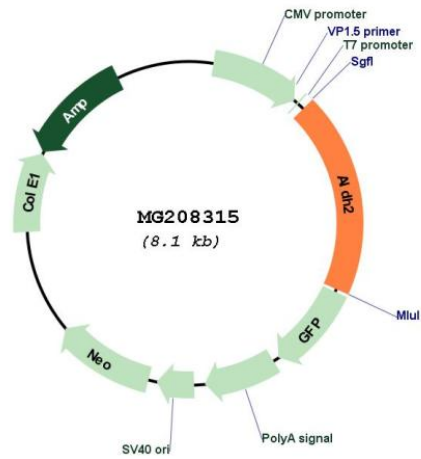
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



<b>ACCN:</b>	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>	2208 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>Gene Summary:</b>	Is capable of converting retinaldehyde to retinoic acid.[UniProtKB/Swiss-Prot Function]