

## Product datasheet for **SC119706**

### ALDH1A3 (NM\_000693) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** ALDH1A3 (NM\_000693) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** ALDH1A3  
**Synonyms:** ALDH1A6; ALDH6; MCOP8; RALDH3  
**Mammalian Cell Selection:** None  
**Vector:** pCMV6-XL4  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_000693 edited  
 ATGGCCACCGCTAACGGGGCCGTGGAAAACGGGCAGCCGGACAGGAAGCCGCCGCCCTG  
 CCGCGCCCATCCGCAACCTGGAGGTCAAGTTCACCAAGATATTTATCAACAATGAATGG  
 CACGAATCCAAGAGTGGGAAAAAGTTTGCTACATGTAACCCTTCAACTCGGGAGCAAATA  
 TGTGAAGTGAAGAAGGAGATAAGCCCGACGTGGACAAGGCTGTGGAGGCTGCACAGTT  
 GCCTTCCAGAGGGGCTCGCCATGGCGCCGGCTGGATGCCCTGAGTCGTGGGCGGCTGCTG  
 CACCAGCTGGCTGACCTGGTGGAGAGGGACCGGCCACCTTGGCCGCCCTGGAGACGATG  
 GATACAGGAAGCCATTTCTTATGCTTTTTTCATCGACCTGGAGGGCTGTATTAGAACC  
 CTCAGATACTTTGCAGGGTGGGACAGACAAAATCCAGGGCAAGACCATCCCACAGATGAC  
 AACGTCGTGTGCTTACCAGGCATGAGCCATTGGTGTCTGTGGGGCCATCACTCCATGG  
 AACTTCCCCTGTGATGCTGGTGTGGAAGCTGGCACCCGCCCTCTGCTGTGGGAACACC  
 ATGGTCCTGAAGCCTGCGGAGCAGACACCTCTCACCGCCCTTATCTCGGCTCTCTGATC  
 AAAGAGGCCGGGTTCCCTCCAGGAGTGGTGAACATTGTGCCAGGATTCGGGCCACAGTG  
 GGAGCAGCAATTTCTTCTCACCTCAGATCAACAAGATCGCCTTACCAGGCTCCACAGAG  
 GTTGGAAAAGTAAAGAAGCTGCGTCCCGGAGCAATCTGAAGCGGGTACGCTGGAG  
 CTGGGGGGGAAGAACCCTGCATCGTGTGTGCGGACGCTGACTTGGACTTGGCAGTGGAG  
 TGTGCCATCAGGGAGTGTCTTCAACCAAGGCCAGTGTGCACGGCAGCCTCCAGGGTG  
 TTCGTGGAGGAGCAGGTCTACTGAGTTTGTGAGGCGGAGCGTGGAGTATGCCAAGAAA  
 CGGCCCTGGGAGACCCCTTCGATGTCAAACAGAACAGGGGCCCTCAGATTGATCAAAAAG  
 CAGTTCGACAAAAATCTTAGAGCTGATCGAGAGTGGGAAGAAGGAAGGGGCCAAGCTGGAA  
 TGGCGGGGCTCAGCCATGGAAGACAAGGGGCTTTCATCAAACCCACTGTCTTCTCAGAA  
 GTCACAGACAACATGCGGATTGCCAAAGAGGAGATTTTCGGGCCAGTGCAACCAACTG  
 AAGTTCAAAGTATCGAAGAAGTGATAAAAAGAGCGAATAGCACCGACTATGGACTCACA  
 GCAGCCGTGTTCAAAAAATCTCGACAAAGCCCTGAAGTTGGCTTCTGCCTTAGAGTCT  
 GGAACGGTCTGGATCAACTGCTACAACGCCCTCTATGCACAGGCTCCATTTGGTGGCTTT  
 AAAATGTCAGGAAATGGCAGAGAACTAGGTGAATACGCTTTGGCCGAATACACAGAAGTG  
 AAAACTGTCACCATCAAACCTGGCGACAAGAACCCTGA



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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_000693 unedited</p> <pre>GCCGCGAATTCGGCACGAGAGCCGGTGCGCCGAGACTAGGGCGCCTCGGGCCAGGGAGC GCGGAGGAGCCATGGCCACCGCTAACGGGGCCGTGAAAAACGGGCAGCCGGACAGGAAGC CGCCGGCCCTGCCGCGCCCCATCCGCAACTGGAGGTCAAGTTCACCAAGATATTTATCA ACAATGAATGGCACGAATCCAAGAGTGGGAAAAAGTTTGTACATGTAACCCTTCAACTC GGGAGCAAATATGTGAAGTGAAGAAGGAGATAAGCCCGACGTGGACAAGGCTGTGGAGG CTGCACAGGTTGCCTTCCAGAGGGGCTGCCATGGCGCCGGCTGGATGCCCTGAGTCGTG GGCGGCTGCTGCACCAGCTGGCTGACCTGGTGGAGAGGGACCGGCCACCTTGGCCGCC TGGAGACGATGGATACAGGGAAGCCATTTCTTCATGCTTTTTTTCATCGACCTGGAGGGCT GTATTAGAACCCTCAGATACTTTGCAGGGTGGGCAGACAAAATCCAGGGCAAGACCATCC CCACAGATGACAANCCTGCTGTGCTTACCAGGCATGAGCCATTGGTGTCTGTGGGGCC ATCACTCCATGGGAACCTCCCCTGCTGATGCTGGTGTGGAAGCTGGCACCCGCCCTCTGC TGTGGGAACACCATGGTCTGAAGCCTGCGGAGCAGACACCTCTACCGCCCTTTATCTC G</pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_000693 unedited</p> <pre>AGCTCTGNACC GCGCCGCATNCTAGNGATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTT TTTTTCTCAAATATCCAATTTTATTTTATCATTCTCGCATTGGGGGATGCGATCTGCA GCTAGGATCGGAATCCAGGCCATAGATTTTTAAACCACACCAGGGGTAAACCTTA AAAAAAGGGAAACCTAACACTATATATTTCCATTTCTAAATACAGTATATTACAGAAG TTTAAATATACCACCTTTGGGTACTTACAATAAAAAAGATACAATAACTCTACCAATT ATAAATAATGTAGCATTTTATATAAAGACATTATCGTACAATGGAAAAATAGGAACCT CTAACGTATCACTATCAAGGTTAGGGTCTATATCTACTTGAGATAAAAATACTGAAAATTC AGGGTATGAAGCCAAATCCTGATTTAACAAGTTATTGGTGTAGTATAAGGGATAAGGGTTAG CTGATGAAGGGAAGGCAAATGTGGTAATTTATATCTCTGACAAGGGTGTAGGCCCATTT TATACATGGTTTTCGTTATACACACACTGGTCTGTTACGGGCCCTCATTTTATTATTGC CCTCCCAACTTAATTTGCAAACCTAAGCACTACTTTCCCATAGGAAAGTCTAGTTAG TACCATAAAAAGTATCCGCCGATAACACATTGGTTTTTGTGTTTTGAAAGCTTTGGGGAC CCTTTAAGTTTCCAAGGTAAAACCTGAAAATGCCACATCTTTGGGACCCCAAGAGAAAA AAAAATCCACCCTGCCGGGAAAAATTCGGGCCCTTGGAGAAGACCGAGGCCTCCTAAAA CCGGGGTTTTACTACCTCTCAAATTAATCAAACGGCCTAAAAA AACGGGGTGGTTATC CGCCACCTTTCCGGGGGCCCTTCCAAATCAATGG</pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_000693
<b>Insert Size:</b>	3200 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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_000693.1</a> , <a href="#">NP_000684.1</a>
<b>RefSeq Size:</b>	3442 bp
<b>RefSeq ORF:</b>	1539 bp
<b>Locus ID:</b>	220
<b>UniProt ID:</b>	<a href="#">P47895</a>
<b>Cytogenetics:</b>	15q26.3
<b>Domains:</b>	aldehyd
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Drug metabolism - cytochrome P450, Glycolysis / Gluconeogenesis, Histidine metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Phenylalanine metabolism, Tyrosine metabolism
<b>Gene Summary:</b>	<p>This gene encodes an aldehyde dehydrogenase enzyme that uses retinal as a substrate. Mutations in this gene have been associated with microphthalmia, isolated 8, and expression changes have also been detected in tumor cells. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2014]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).</p>