

## Product datasheet for **SC119710**

### ALDH9A1 (NM\_000696) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ALDH9A1 (NM_000696) Human Untagged Clone
Tag:	Tag Free
Symbol:	ALDH9A1
Synonyms:	ALDH4; ALDH7; ALDH9; E3; TMABA-DH; TMABADH; TMABALDH
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM\_000696 edited  
ATGAGCACTGGCACCTTCGTGTCGTGTCGACGCCGCTCAATTACCGCGGCGGGGCCCGCGTG  
GAGCCGCGGACGCTCCGGTACCGAGAAAGCTTTCGAGCCAGCAACCGCCGAGTGATA  
GCTACTTTACATGTTCCAGGAGAAAAGGAAGTAAATTTGGCTGTTCAAAATGCAAAGGCT  
GCTTTTAAATATGGAGTCAAAATCTGGCATGGAGCGTTGCCGAATCCTTTTGGAGGCT  
GCCAGGATAATAAGGGAACGGGAGGATGAAATTGCTACTATGGAGTGCATCAACAATGGC  
AAGTCCATCTTTGAGGCCGCTTGGACATTGACATTTCTGGCAGTGCCTGGAGTATTAT  
GCGGGCTTGGCTGCATCCATGGCTGGTGAACACATCCAGCTCCCAGGTGGATCGTTTGGT  
TATACCAGAAGAGAACCCTTGGGGTATGTGTGGGAATAGGAGCATGGAACCTCCCTTT  
CAGATTGCCTCTTGAAGTCGGCTCCAGCATTAGCCTGTGGTAATGCCATGGTCTTTAA  
CCTTCTCCCTTTACACCTGTTTCTGCATTGCTACTGGCTGAAATCTACAGTGAGGCTGGT  
GTACCTCCTGGGCTCTTCAATGTGGTGCAGGGAGGGGCTGCCACAGGCCAGTTTCTGTGT  
CAGCATCCCGATGTGGCCAAAGTCTCCTTCACTGGAAGTGTGCCACTGGCATGAAGATC  
ATGGAGATGTCAGCTAAAGGAATCAAACCTGTTACCTTGGAACTTGGAGGCAAATCTCCA  
CTCATCATCTTCTCAGACTGTGATATGAACAATGCTGTAAAGGGGGCGCTGATGGCCAAC  
TTCCTCACACAAGGCCAGGTTTGTGTAATGGCACAAGAGTATTTGTGCAGAAAGAAATT  
CTTGATAAATTTACAGAGGAAGTGGTGAACAGACCCAAAGGATTAATAATGGAGATCCC  
GGTTTTGTCAAAGTGGCAAAGGAGCAGGGTCTAAAGTGTATGTGGTGGAGATATAT  
GTACCTGAAGATCCCAAATTAAGGATGGATATTACATGAGACCTTGTGTATTAACATAAT  
TGACAGAGACGACATGACCTGTGTGAAGGAAGAGATCTTTGGGCCTGTTATGTCCATTTTA  
TCATTTGACACTGAAGCTGAGGTTCTAGAAAGAGCCAATGATACCACTTTTGGACTAGCA  
GCTGGCGTCTTTACCAGGGACATCCAACGGGCTCATAGAGTGGTAGCTGAGCTTCAGGCT  
GGGACGTGCTTCATTAACAATAAACGTCAGCCAGTGGAGTTGCCCTTTGGTGGATAT  
AAGAAGTCAGGATTTGGCAGAGAGAACGGCCGTGTGACAAATCGAATATTATTCACAGCTG  
AAGACTGTGTGTGGAGATGGGTGATGTGGAATCTGCTTTTGA



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_000696 unedited  
 NCAGGCCGCGCAATTCGGCACGAGGCGCGGAGCTGCGTCCGCCACTCATGTTTCTCCGAG  
 CAGGCCTGGCCGGGCTCTCCCGCTTCTTCGCAGTCTTCGGCCCTCTCCTGTGCGCCGCA  
 TGAGCACTGGCACCTTCGTGCTGCGCAGCCGCTCAATTACCGCGGGGGGGCCCGGTGG  
 AGCCGGCGGACGCCTCCGGTACCGAGAAAGCTTCGAGCCAGCAACCGGCCGAGTGATAG  
 CTACTTTACATGTTTCAGGAGAAAAGGAAGTAAATTTGGCTGTTCAAAATGCAAAGGCTG  
 CTTTTAAATATGGAGTCAAAAATCTGGCATGGAGCGTTGCCGAATCCTTTGGAGGCTG  
 CCAGGATAATAAGGGAACGGGAGGATGAAATTGCTACTATGGAGTGCATCAACAATGGCA  
 AGTCCATCTTTGAGGCCCGCTTGGACATTGACATTTCTGGCAGTGCCTGGAGTATTATG  
 CGGGCTTGGCTGCATCCATGGCTGGTGAACACATCCAGCTCCCAGGTGGATCGTTTGGTT  
 ATACCAGAAGAGAACCCTTGGGTATGTGTGGGAATAGGAGCATGGAACACCCCTTTC  
 AGATTGCCTCTTGAAGTCGGCTCCAGCATTAGCCTGTGGTAATGCCATGGTCTTTAAAC  
 CTTCTCCCTTTACACCTGTTTCTGCATTGCTACTGGCTGAGATCTACAGTGAGGCTGGT  
 TACCTCCTGGGCTCTTCAATGTGGTGCNAGGGAGGGCTGCCACAGGCCAGTTTCTGTGTC  
 AGCATCCCGATGTGGCCAAAGTCTCCTTCACTGGGAGTGTGCCACTGGCATGAAGATCA  
 TGGAGATGTCAGC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_000696 unedited  
 GACATTGGAGTGGCAACTTCCAGGCCAGNNAAGCACTGGGGNAGGGTCACAGGCATGCC  
 ACCCGGTATCTGTTTCAGGAAAACAGCTATGACCGCGCCGCAATCTAGAGTCGAGTTTT  
 TTAAACAGTGGGATT  
 TATTTTAAATTTCCCATTTTACATTACCATACAAATAATTTTACATTTAAAGGGTACCT  
 CCCCTGGTGTAAAACACCAGGCTTTTTTCAAGGACCCAAGATAGGGAATAGATTTCTCT  
 CTATCGCAGTAGTGAACAAAACAAAGTCTTACTAGGCAAGTTCACATTCACACAAAAT  
 TTGACCCCATTTATTATCTAATCCCTCCCTATCCAGTTGTGACCTTTCTCAATGGAAT  
 GACAAGGGGATATAGCTTAAAAAATGTCAATGAGCTGAAATCATCTCTTCTGATTCTAC  
 CCGGAACCTATAAAGGAACAAGTTTTTTTTTTGGTTTTTGTTTTTTTCTTCAAACACTAG  
 GCAAGTGAACCAAGTGGGAATGGAAAAAGAACAAAAAATCCACCAACTGGTTGGGATCAA  
 TTAGTTGTAATACCCTGCACTTGGATCAACCAGGAACAATTTTTTTGAAATACCCCAA  
 AAAATTAACATTATCAGTGGGCCAAATGTGTGGAAAATGTATTATCCTAGTCTCTTTTCC  
 TGTTCTCTAAAAGTATGTTACTGGCTCTTAAAAAATTTACAAAAATACGCTTTGAGGAG  
 AATCACAGCTTTCTTATTAGTATCTACAGGCACTTAATGCACATTTTTCAGTGAGGAACC  
 TGATGGANAGAAAAAATAACATGAACCTTTCTTATACTGAACGCCAAATTCTGGGA  
 TGTAAAAACATTCATTGTTACTGCCTC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_000696

**OTI Disclaimer:**

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).

**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).

<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_000696.2</a> , <a href="#">NP_000687.2</a>
<b>RefSeq Size:</b>	2713 bp
<b>RefSeq ORF:</b>	1485 bp
<b>Locus ID:</b>	223
<b>UniProt ID:</b>	<a href="#">P49189</a>
<b>Cytogenetics:</b>	1q24.1
<b>Domains:</b>	aldehyd
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Arginine and proline metabolism, Ascorbate and aldarate metabolism, beta-Alanine metabolism, Butanoate metabolism, Fatty acid metabolism, Glycerolipid metabolism, Glycolysis / Gluconeogenesis, Histidine metabolism, Limonene and pinene degradation, Lysine degradation, Metabolic pathways, Propanoate metabolism, Pyruvate metabolism, Tryptophan metabolism, Valine, leucine and isoleucine degradation
<b>Gene Summary:</b>	<p>This protein belongs to the aldehyde dehydrogenase family of proteins. It has a high activity for oxidation of gamma-aminobutyraldehyde and other amino aldehydes. The enzyme catalyzes the dehydrogenation of gamma-aminobutyraldehyde to gamma-aminobutyric acid (GABA). This isozyme is a tetramer of identical 54-kD subunits. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (1).</p>