

## Product datasheet for **SC119752**

### **ADH1C (NM\_000669) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ADH1C (NM_000669) Human Untagged Clone
Tag:	Tag Free
Symbol:	ADH1C
Synonyms:	ADH3
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>NCBI ORF sequence for NM_000669, the custom clone sequence may differ by one or more nucleotides

```
ATGAGCACAGCAGGAAAAGTAATCAAATGCAAAGCAGCTGTGCTATGGGAGTTAAAGAAACCCCTTTTCCA
TTGAGGAGGTAGAGGTTGCACCTCCTAAGGCTCATGAAGTTCGCATTAAGATGGTGGCTGCAGGAATCTG
TCGTTTCAGATGAGCATGTGGTTAGTGGCAACCTGGTGACCCCTTCTGTGATTTTAGGCCATGAGGCA
GCCGGCATCGTGGAAAGTGTGGAGAAGGGGTGACTACAGTCAAACCAGGTGATAAAGTCATCCCGCTCT
TTACTCCTCAGTGTGAAAATGCAGAATTTGTA AAAACCCAGAAAGCAACTACTGCTTGAAAATGATCT
AGGCAATCCTCGGGGACCCCTGCAGGATGGCACCAGGAGGTTACCTGCAGCGGGAAGCCATCCACCAC
TTCGTCGGCGTCAGCACCTTCTCCAGTACACAGTGGTGGATGAGAATGCAGTGGCCAAAATTTGATGCAG
CCTCGCCCTGGAGAAAGTCTGCCTCATTGGCTGTGGATTTTCGACTGGTTATGGGTCTGCAGTCAAAGT
TGCCAAGGTCACCCAGGGTCTACCTGTGCTGTGTTTGGCCTGGGAGGGTTCGGCCTATCTGTTGTTATG
GGCTGTAAGCAGCTGGAGCAGCCAGAATCATTGCTGTGGACATCAACAAGGACAAATTTGCAAAGGCTA
AAGAGTTGGGTGCCACTGAATGCATCAACCCTCAAGACTACAAGAAACCCATTAGGAAGTGCTAAAGGA
AATGACTGATGGAGGTGTGGATTTTTCGTTTGAAGTCATCGGTCGGCTTGACACCATGATGGCTTCCCTG
TTATGTTGTCATGAGGCATGTGGCACAAGTGTGCTTGTAGGGGTACCTCCTGATTCGCAACCTCTCAA
TAAACCCATGCTGCTACTGACTGGACGCACGTGGAAAGGAGCTATTTTGGAGGCTTTAAGAGTAAAGA
ATCTGTCCCAAACCTGTGGCTGACTTTATGGCTAAGAAGTTTTCACTGGATGCATTAATAACAAATATT
TTACCTTTTGA AAAAATAAATGAAGGATTTGACCTGCTTCGCTCTGGAAAGAGTATCCGTACCGTCTCTGA
CGTTTTGA
```



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_000669 unedited  
 GGAATTTGTATACGACTCATATAGGCGGCCGCGAAATTCGCACGAGCCATTTCTTTATG  
 ATTTGATAGTCTGAGAAGAAACGACGGGTGTGGCTTAAAAACCTAGATCACGTGTGTAGT  
 TGGAAATGGGTGTATATGAGCAAAACAAAATAAATACCTGTGCAACATACCTGCTTTATG  
 CACTCAAGCAGAGAAGAAATCCACAAGTACTCACCAGCCTCCTGGTCTGCAGAGAAGACA  
 GAATCAATATGAGCACAGCAGGAAAAGTAAATCAAATGCAAAGCAGCTGTGCTATGGGAGT  
 TAAAGAAACCCCTTTTCCATTGAGGAGGTAGAGGTTGCACCTCCTAAGGCTCATGAAGTTC  
 GCATTAAGATGGTGGCTGCAGGAATCTGTCGTTACAGATGAGCATGTGTTAGTGGCAACC  
 TGGTGACCCCTTCTGTGATTTTAGGCCATGAGGCAGCCGGCATCGTGAAAGTGTG  
 GAGAAGGGGTGACTACAGTCAAACCAGGTGATAAAGTCATCCCGCTTTACTCCTCAGT  
 GTGGAAAATGCAGAATTTGTA AAAACCCAGAAAGCAACTACTGCTTGAAAAATGATCTAG  
 GCAATCCTCGGGGACCTGCAGGATGGCACCAGGAGTTACCTGCAGCGGGAAGCCCA  
 TCCACCACTTCGTGCGCTCAGCACCTTCTCCATACACGGTGGTGGATGAGAATGCAGT  
 GGCCAAAATTGATGCAGCCTCGCCCTGGAGAAAGTCTGCCTCATTGGCTGTGGATTNTC  
 GACTGGNTATGGGTCTGCAGTCAAAGTTGCCAAGGTCACCCAGGNTCTACTGTGCTGT  
 NGTTGGCCCTGGAGGNGTCGNCTATCTGNTGTTATGGGCTGTAAGCAGCTGNAGCANCA  
 NAATCATGCTGTGGACTACAAGACAATTGCAANGCTAAGAGTGGNTGCACTGATGCTC  
 ACCTNAGACTACAGAACATTCAGATGCTAAGAA

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_000669 unedited  
 CTTACTTGNACCGCGCCGAATCTANGATCGAGTTTTTTTTTTTTTTTTTTTTTAAATGGT  
 TAAGAAGGAAGGTTTATTGGCTTCAATCCCCAGTTGATGTTCAACACTTTATTTAGTTC  
 TCATTTGGATTTTAAACATTTGCTTGACAAATAATTTCCCATCAATTTCCATTTCTTTGG  
 AAAGTCCACGTGTAATTTATTTTAAACATCTCTGAAGAGCAGAATTAATGATATTTCC  
 TAGCTGTTGCTCCAGATCATGTAGGTTAGAGGAGGCTGAAAAGTCTACAAGGGAAGGCA  
 TCTGTATTGTTTTAAAACGTCAGGACGGTACGGTACTCTTTCCAGAGCGAAGCAGGTCA  
 AATCCTTCATTTATTTTTTCAAAAAGTAAAATATTTGTTATTAATGCATCCAGTGA AAAAC  
 TTCTTAGCCATAAAGTCAGCCACAAGTTTGGGGACAGATTCTTTACTCTTAAAGCCTCCA  
 AAAATAGCTCCTTTCCACGTGCGTCCAGTCAGTAGCAGCATAGGGTTTATTGAGAGGTTT  
 TGGGAATCAGGAGGTACCCTACAATGACACTTGTGCCACATGCCTCATGACAACATAAC  
 AGGGAAGCCATCATGGTGTCAAGCCGACCGATGACTTCAAACGAAAAATCCACACCTCCA  
 TCAGTCATTTCTTTAGCACTTCTGAAATGGGTTTCTTGTAGTCTTGAGGGGTGATGCAT  
 TCAGTGGCACCCAACTCTNTAGCCNNTTGCAATTTGCTTGTGNTGATGTCCACAGCAATG  
 ATNCTGGCTGCTTCAGCTGCTTTACAGCCCCATACAACAGATAAGCCGACCCCTCCAGC  
 CAAACCAGNACAAGTAGACCCTGGGGTGACCTNGNCACTTNGACTGCNGACCCATACCCG  
 TCGAAATCCCCAGCCCATGAGCAGACTTCTCCAGGGGCGAGGCTGCATCATTTTG

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_000669

**Insert Size:**

1650 bp

**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).

**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:** [NM\\_000669.3](#), [NP\\_000660.1](#)

**RefSeq Size:** 1497 bp

**RefSeq ORF:** 1128 bp

**Locus ID:** 126

**UniProt ID:** [P00326](#)

**Cytogenetics:** 4q23

**Domains:** ADH\_zinc\_N

**Protein Families:** Druggable Genome

**Protein Pathways:** Drug metabolism - cytochrome P450, Fatty acid metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Retinol metabolism, Tyrosine metabolism

**Gene Summary:** This gene encodes class I alcohol dehydrogenase, gamma subunit, which is a member of the alcohol dehydrogenase family. Members of this enzyme family metabolize a wide variety of substrates, including ethanol, retinol, other aliphatic alcohols, hydroxysteroids, and lipid peroxidation products. Class I alcohol dehydrogenase, consisting of several homo- and heterodimers of alpha, beta, and gamma subunits, exhibits high activity for ethanol oxidation to acetaldehyde, thus playing a major role in ethanol catabolism. Three genes encoding alpha, beta and gamma subunits are tandemly organized in a genomic segment as a gene cluster. An association between ADH1C polymorphism and alcohol dependence has not been established. [provided by RefSeq, Sep 2019]  
Transcript Variant: This variant (1) represents the longer transcript and encodes the functional protein.