

Product datasheet for **SC330809**

ALDH1L1 (NM_001270365) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALDH1L1 (NM_001270365) Human Untagged Clone
Tag:	Tag Free
Symbol:	ALDH1L1
Synonyms:	10-fTHF; 10-FTHFDH; FDH; FTHFD
Vector:	pCMV6-Entry (PS100001)



[View online »](#)

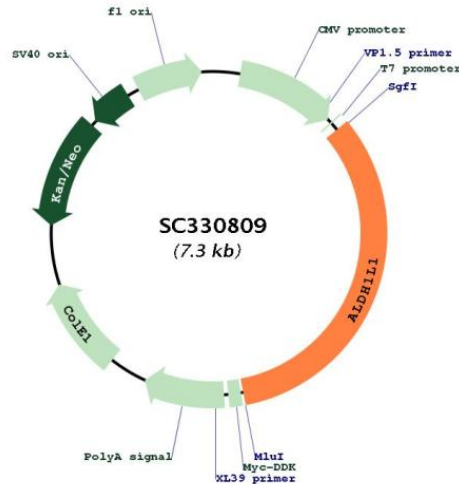
Fully Sequenced ORF: >SC330809 representing NM_001270365.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

```

ATGAAGATTGCAGTGATTGGACAGAGCCTGTTTGGCCAGGAAGTTTACTGCCACCTGAGGAAGGAGGGC
CACGAAGTGGTGGGTGTGTTCACTGTTCCAGACAAGGATGGAAAGGCCGACCCCTGGGTCTGGAAGCT
GAGAAGGATGGAGTGCCGGTATTCAAGTACTCCCGTGGCGTGCAAAAGGACAGGCTTTGCCTGATGTG
GTGGCAAAATACCAGGCTTTGGGGGCCAGCTCAACGTCTGCCCTTCTGCAGCCAATTCATCCCCATG
GAGATAATCAGTGCCCCCGGCATGGCTCCATCATCTATCACCCGTCAGTCTCCCTAGGCACCGAGGG
GCCTCGGCCATTCAAACTGGATCCGCGGGAACGACAAGGTGCCGGGAGCCTGGACAGAGGCCTGTGAA
CAGAACTGACATTTTTCAACTCAACGCTGAACACTTCAGGCCTGGTGCCGAGGGAGACGCTTTGCC
ATCCCAGGAGCCCATCGGCCAGGGTGGTACCAGCAAGCAGGACTCATCTCTTTGGGAATGATGACAAA
ATGCTGCTGGTGAAGAATATTCAGCTGGAGGATGGCAAAATGATCCTGGCCTCGAACTTCTTTAAGGG
GCAGCCAGCAGTGCCTTGAGCTGACAGAGGCAGAGCTGGTACTGCGGAGGCTGTGCGGAGTGTGG
CAGCGGATCCTCCCAAAGTCTGGAGGTTGAAGACTCCACTGATTTCTCAAGTCAGGGCCGCGTCT
GTGGACGTTGTGAGGCTGGTGGAGGAAGTGAAGGAGCTGTGTGATGGCCTGGAGTTAGAAAATGAAGAT
GTGTACATGGCATCCACCTTTGGGGACTTCATCCAGCTGTAGTGAGGAAGCTGCCAGGGGACGATGAG
GAGGGCGAGTGCAGCATTGACTACGTGGAATGGCAGTGAACAAGCGCACTGTCCGCATGCCCCACCAG
CTTTCATTGGGGGGGAGTTCGTGGATGCCGAGGGCGCCAAGACCTCTGAGACCATCAATCCCACCGAT
GGAAGTGTGATCTGCCAGGTATCCCTGGCCCAAGTACCAGCAGTGCACAAGGCAGTGGCCGAGCCAAG
GATGCCTTTGAGAATGGACGGTGGGGGAAGATCAGTGCAGCGGACCGGGGCGGCTGATGTACAGGTTG
GCAGATTCATGGAGCAGCACCAGGAGGAGCTGGCCACCATTGAGGCCCTGGATGCGGGTGCCTGTAC
ACGCTGGCCCTGAAGACCCAGTGGGCATGTCCATCCAGACCTCCGCTACTTTGCTGGTGGTGTGAC
AAGATCCAGGGCTCCACCATCCCATCAACCAGGCCAGACCAACCGCAACCTGACCTTGACCAGGAAG
GAGCCTGTTGGGGTTTGTGGCATCATCCCCCTGGAACATCCCCCTGATGATGCTGTCCTGGAAGACA
GCTGCCTGCCTGGCTGCCGGGAACACAGTGGTATCAAGCCTGCTCAGGTGACCCCACTCACAGCCTTG
AAGTTTGCAGAGCTGACATTAAGGCCGGCATTCCCAAAGGTGTGGTTAACGTCCTCCCAGGATCTGGC
TCCCTGGTCGGCCAGAGACTCTCAGACCATCCTGATGTGAGGAAAATCGGGTTCACAGGCTCCACAGAG
GTGGGCAAGCACATCATGAAAAGCTGTGCCATAAGTAACGTGAAGAAGGTGTCCCTGGAAGTGGCGGG
AAGTACCCTCATCATCTTTGCTGACTGTGACCTCAACAAGGCTGTGCAGATGGGGATGAGTTCTGTT
TTCTTCAACAAAGGAGAGAATTGCATTGCAGCAGGCCACTCTTTGTGGAGGACTCCATTATGATGAG
TTCGTGCGGAGAGTGGTGAAGAGGTGCGGAAGATGAAGTGGGCAACCCGCTGGACAGGGACACCGAC
CACGGGCCGAGAATCACCATGCCACCTGTGAAGCTGATGGAGTACTGCCAGCATGGCGTGAAGGAA
GGGGCCACACTGGTCTGCGGCGGAATCAGTCCCTCGGCCAGGGTTCTTCTTTGAGCCAAGTGTTC
ACAGACGTGGAAGACCACATGTTTCATAGCCAAGGAGGAGTCTTTCGGGCCTGTGATGATCATCTCTCGG
TTTGCTGATGGGGACTTGGATGCCGTGTGCTCGGGCCAATGCCACGGAATTTGGCCTGGCTTCTGGT
GTCTTACCAGGGACATCAACAAGGCCCTGTATGTGAGTACAAGCTCCAGGCAGGCACTGTGTTTGTG
AACACGTACAACAAGACCAGCTGGCCGCTCCCTTCGGAGGATTCAAACAGTCTGGATTTGGCAAAGAT
CTAGGAGAGGCGGCTCTGAACGAGTACCTGCGGGTCAAGACAGTGACCTTCGAATACTGA
  
```

Restriction Sites: SgfI-MluI

Plasmid Map:



ACCN: NM_001270365

Insert Size: 2406 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_001270365.1](#)

RefSeq Size: 3003 bp

RefSeq ORF: 2406 bp

Locus ID: 10840

UniProt ID: [O75891](#)

Cytogenetics: 3q21.3

Protein Families: Druggable Genome

Protein Pathways: One carbon pool by folate

MW: 87.6 kDa

Gene Summary:

The protein encoded by this gene catalyzes the conversion of 10-formyltetrahydrofolate, nicotinamide adenine dinucleotide phosphate (NADP⁺), and water to tetrahydrofolate, NADPH, and carbon dioxide. The encoded protein belongs to the aldehyde dehydrogenase family. Loss of function or expression of this gene is associated with decreased apoptosis, increased cell motility, and cancer progression. There is an antisense transcript that overlaps on the opposite strand with this gene locus. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2012]

Transcript Variant: This variant (3) differs in the both the 5' UTR and the coding sequence, but maintains the reading frame, compared to variant 1. The resulting isoform (3) is shorter than isoform 1.