

Product datasheet for **SC302791**

ALDH1L2 (NM_001034173) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALDH1L2 (NM_001034173) Human Untagged Clone
Tag:	Tag Free
Symbol:	ALDH1L2
Synonyms:	mtFDH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



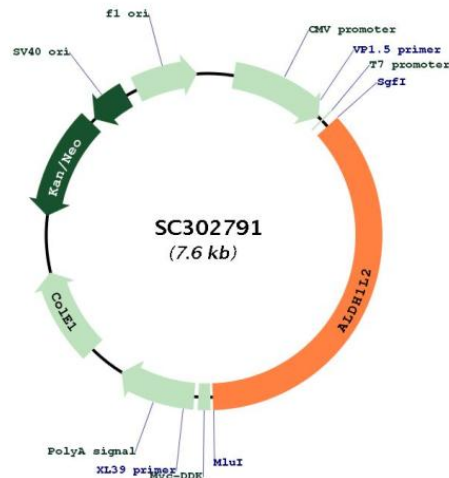
[View online »](#)

Fully Sequenced ORF: >SC302791 representing NM_001034173.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

```

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGCTCGCGCGGGCAGCCAGGCGCTCCGGCGCTTCTCCACTGGCCGGGTTTATTTCAAAAACAAGCTG
AAGTTGGCACTAATTGGCCAGAGCTCTTTGGACAAGAAGTCTATAGCCACCTCCGCAAAGAGGGCCAC
CGAGTAGTAGGGGTGTTACAGTTCAGACAAGGATGGAAAAGCTGACCCCTCTGGCTTTGGCTGCAGAG
AAAGATGGGACCCTGTGTTCAAGCTTCTCTAAATGGAGGGTCAAGGGCAAGACCATCAAAGAAGTGGA
GAAGCCTACAGATCCGTGGGTGCAGAGCTAAATGTGCTCCCTTTCTGCACTCAGTTCATTCCCATGGAT
ATAATTGATAGTCCAAAGCACGGCTCTATCATTATCACCCATCCATCCTGCCAGGCACAGAGGAGCC
TCTGCTATCAATTGGACTCTAATTATGGGAGATAAGAAAGCTGGGTTTTCTGTTTTCTGGCTGATGAT
GGCTTGGATACAGGACCCATCCTTCTTCAGAGATCATGTGATGTTGAACCAATGATACAGTGGATGCA
CTTTATAATCGGTTTCTTTTCTGAAGGAATCAAGGCCATGGTAGAAGCTGTCCAACCTCATAGCTGAT
GGAAAAGCTCCTCGTATACCCAGCCAGAAGAAGGGGCAACATATGAAGGTATCCAGAAAAAGGAAAT
GCTGAGATTTCTTGGGACCAGTCTGCCGAAGTTTTACATAACTGGATTCCAGGTCATGATAAAGTCCTT
GGAGCTTGGACAGAGATAAATGGACAGATGGTCACTTTCTATGGCTCGACATTACTGAATAGCTCTGTG
CCTCCTGGAGAACCCTGGAAATTAAGGTGCCAAGAAGCCTGGTCTCGTTACCAAAAAATGGACTTGTT
CTTTTTGGTAACGATGGAAAAGCACTGACGGTGAGAAAATCTGCAGTTTGAAGATGGAAAATGATCCCT
GCCTCTCAGTACTTTTCAACGGGTGAGACGTGAGTGGTAGAACTGACAGCTGAAGAGGTGAAAGTGGCA
GAGACCATCAAGGTCATCTGGGCTGGAATTTAAGCAATGTCCCATTATTGAAGACTCAACAGACTTC
TTTAAATCTGGAGCAAGCTCAATGGATGTTGCCAGGCTGGTTGAAGAGATCAGACAGAAATGTGGTGG
CTTCAGTTGCAGAATGAAGATGTCTATATGGCCACCAAGTTTGAAGGCTTTATCCAAAAGGTCGTGAGG
AAACTGAGAGGAGAAGATCAAGAGGTGGAGCTGGTTGTAGATTATTTTCAAAGGAGTCAATGAAATC
ATGGTAAAAATGCCATACCAGTGTTCATAAATGGACAGTTCACAGATGCAGACGATGGAAAAGCTTAC
GACACTATCAACCAACAGATGGATCTACAATATGCAAAGTATCCTACGTTCTTTGGCGGATGTTGAT
AAAGCAGTAGCAGCAGCAAAAGATGCTTTTGAACCGGTGAATGGGGAAGAATGAATGCAAGAGAAAAGA
GGAAGATTGATGTATAGACTTGCAGACCTACTGGAAGAGAACCAAGAAGAGCTGGCAACTATTGAAGCC
CTTGATTACAGGGGCTGTCTATACCTTGGCCCTGAAGACACACATTGGAATGTCTGTGCAACATTGAGA
TATTTTGTGGCTGGTGGCAGAAAATTCAGGGTCTACTATTCCAATCAACCAGGCCCGTCCAAATCGC
AATCTGACCTTACCAAGAAAGAGCCACTCGGTGTCTGTGCCATTATTATCCCTGGAACCTACCCGCTG
ATGATGCTGGCATGGAAGAGTGTGCGTGTGGCAGCAGGCAATACCTTAGTGCTCAAGCCAGCAGCAG
GTCACGCCCTTGACTGCTTTGAAGTTTGCAGAAGTGTCTGTGAAAGCAGGCTTTCCAAAGGGGGTCAATC
AACATCATTCCAGGCTCAGGTGGCATAGCAGGACAACGCTGTCTGTAACATCCTGACATCCGCAAACTT
GGTTTCACTGGATCCACTCCTATTGGCAACAGATCATGAAGAGCTGTGCTGTTAGCAACTTGAAGAAA
GTTTCCCTTGAGCTTGGTGGCAAGTCTCCACTTATAATATTTAATGACTGTGAACCTGACAAGGCTGTG
CGAATGGGCATGGGAGCAGTATTTTTCAACAAAGGAGAGAAGTGTATTGCTGTGGGCGGTTGTTCCGTG
GAAGAATCCATCCAGCAGCAATTTGTGACAAGAGTGGTAGAAGAAATTAAGAAATGAAAATTTGGTGTG
CCACTTGACAGATCCACTGATCATGGGCCCAAAATCATAAGGCTCATCTGAAAAGCTGTGCAATAC
TGTGAAACTGGAGTGAAAGAAGGGCCACTTTGGTGTACGGGGGAAGACAAGTCCAAAGGCCAGGCTTT
TTCATGGAGCCGACCGTGTTCACAGATGTGGAAGACTACATGTACCTCGCCAAAGAGGAATCCTTTGGG
CCTATTATGGTCAATTTCTAAATTCAAAATGGGGACATCGATGGAGTGTGACAGCAGCAAAATAGTACA
GAGTATGGTTTGGCCTCAGGGGTTTTTACAAGAGACATAAACAAGCTATGTATGTGAGTGAAAACTG
GAAGCAGGAACTGTTTTTATAACACATAACAAGACAGATGTGGCGGCCCTTTGGCGGAGTTAAA
CAATCTGGCTTTGAAAAGACTTAGGTGAGGAAGCTCTAAATGAATATCTCAAACCAAGACGGTGACA
CTGGAATATTAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
  
```

Restriction Sites: SgfI-MluI

Plasmid Map:


ACCN: NM_001034173

Insert Size: 2772 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001034173.3](#)

RefSeq Size: 7555 bp

RefSeq ORF: 2772 bp

Locus ID: 160428

UniProt ID: [Q3SY69](#)

Cytogenetics: 12q23.3

Protein Families: Druggable Genome

MW: 101.7 kDa

Gene Summary: This gene encodes a member of both the aldehyde dehydrogenase superfamily and the formyl transferase superfamily. This member is the mitochondrial form of 10-formyltetrahydrofolate dehydrogenase (FDH), which converts 10-formyltetrahydrofolate to tetrahydrofolate and CO₂ in an NADP(+)-dependent reaction, and plays an essential role in the distribution of one-carbon groups between the cytosolic and mitochondrial compartments of the cell. Alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Oct 2010]

Transcript Variant: This variant (1) encodes a functional protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.