

Product datasheet for **SC336599**

ALDH6A1 (NM_001278593) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALDH6A1 (NM_001278593) Human Untagged Clone
Tag:	Tag Free
Symbol:	ALDH6A1
Synonyms:	MMSADHA; MMSDH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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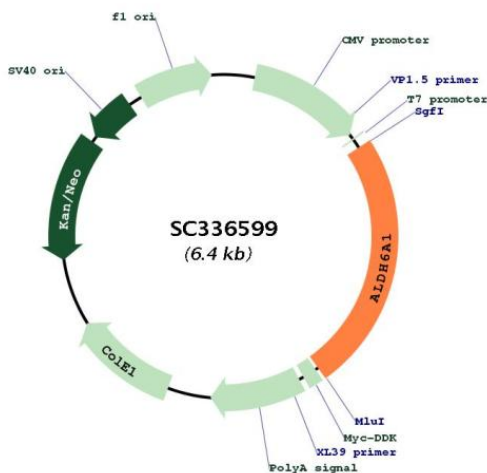
Fully Sequenced ORF: >SC336599 representing NM_001278593.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCGGCCTATTGGCGGGCGGCAGTGCAGCCCAGGCATCTGCAGGTTTCTCCAAGGTGAAATCC
AGTCCCACCTGGTATTCAGCATCTTCTTCTTCTTTCAGTGCCAACTGTAAGCTCTTCATTGGTGGG
AAATTCGTTGAATCCAAAAGTGACAAATGGATCGATATCCACAACCCAGCCACCAATGAGGTCATTGGT
CGGGTCCCTCAGGCCACCAAGGCAGAAATGGATGCAGCCATTGCTTCTGCAAACGTGCTTTTCTGCA
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GATGCTACTCTTCTCACCTGCTGTTGTCATGCCTACCATGGGCCGTTAG
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TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
    
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Restriction Sites: Sgfl-MluI

Plasmid Map:



ACCN: NM_001278593

Insert Size:	1569 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:	<ol style="list-style-type: none">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_001278593.1
RefSeq Size:	4662 bp
RefSeq ORF:	1569 bp
Locus ID:	4329
UniProt ID:	Q02252
Cytogenetics:	14q24.3
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Inositol phosphate metabolism, Metabolic pathways, Propanoate metabolism, Valine, leucine and isoleucine degradation
MW:	56.2 kDa
Gene Summary:	<p>This gene encodes a member of the aldehyde dehydrogenase protein family. The encoded protein is a mitochondrial methylmalonate semialdehyde dehydrogenase that plays a role in the valine and pyrimidine catabolic pathways. This protein catalyzes the irreversible oxidative decarboxylation of malonate and methylmalonate semialdehydes to acetyl- and propionyl-CoA. Methylmalonate semialdehyde dehydrogenase deficiency is characterized by elevated beta-alanine, 3-hydroxypropionic acid, and both isomers of 3-amino and 3-hydroxyisobutyric acids in urine organic acids. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jun 2013]</p> <p>Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 5' coding region, compared to variant 1. This results in a shorter protein (isoform 2), compared to isoform 1.</p>