

Product datasheet for **MG207744**

Aldh3a2 (NM_007437) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aldh3a2 (NM_007437) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Aldh3a2
Synonyms:	Ahd-3; Ahd-3r; Ahd3; Ahd3-r; A1194803; Aldh4; Aldh4-r; FALDH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG207744 representing NM_007437
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCGCCAGGTCCTACGGCTTCGCCAGGCGTTCGGTCCGGCCGATCTCGGCCGCTGCGCTTCCGAT
 TGCAGCAGCTTGAGGCCCTGCGGAGGATGGTGCAAGAGCGCGAGAAGGAAATCTTAGCAGCCATCGCGGC
 AGACCTGAGCAAAAAGTGAAGTCAATGCATACAGTCATGAAGTCATTACCATCCTTGGAGAGATTGATTTT
 ATGTTGGGAATCTTCTGAATTGGCTTCTGCGAGACCGGCTAAGAAGAACCTGTAACCATGATGGATG
 AGGCCTACGTTACGCCGAGCCTCTGGGAGTCGTACTGATTATTGGAGCTTGAATTACCCTTTCGTTCT
 TACCATGCAACCGCTGGTGGGAGCCATTGCTGCAGGAAATGCTGCCATTGTTAAGCCCTCAGAACTCAGT
 GAAAACACGGCCAAGATCTGGCTGAAGTCTCCCTCAGTACTTAGACCAGGACCTGTATGCGATTGTTA
 ATGGCGGTATCCCGAAACCACGGAGCTTCTGAAGCAGCGGTTTGACCACATTCTCTATACAGGAAACAC
 TGCAGTTGAAAAATTGTCATGGAAGCTGCTGCCAAGCATCTGACCCCTGTGACCCTGGAACCTCGCGGG
 AAAAGCCCTTGTTACATTGACAGAGACTGTGATCTGGACGTGGCTTGACAGACGCATAGCCTGGGGAAAGT
 ACATGAATTGTGGTCAAACCTGCATTGCTCCTGACTATATCCTGTGCGAAGCCTCCCTCCAGAATCAAAT
 CGTACAGAAGATTAAGGAAACGGTGAAGGACTTTTATGGGGAAAACATAAAGGCTTCTCCTGACTATGAA
 AGGATCATCAATCTTCGCACTTAAAGAGGTTACAAAGTCTGCTTAAAGGCCAGAAAATAGCTTTCGGTG
 GAGAGATGGATGAGGCCACACGCTACTTAGCCCAACCACTTACAGATGTTGATCCTAACTCCAAGGT
 GATGCAAGAAGAAATTTTGGACCAATCTTCCAATAGTGTCTGTGAAAAATGTAGACGAAGCCATAAAT
 TTCATAAATGACCGTGAAGGCCCTGGCTCTCTACGTATTTCTCGTAACAATAAGCTCATCAAACGGG
 TGATAGATGAGACCTCCAGTGGTGGAGTCACCGCAATGATGTCATGCACTTCACTGTTAATCTCT
 GCCCTTGGAGGTGTGGGTGCCAGTGAATGGGGCGTATCATGGAATAACAGTTTTGATACCTTTTCT
 CATCAGCGCCCTGCTTGTAAAAGGGTTAAAGGGGAAAGCGTCAACAAGCTCAGGTACCCGCCAACA
 GCGAGTCCAAGGTGAGCTGGGCCAAGTTCTCCTGCTGAAGCAGTTCAACAAGGAAGGCTGGGGATGCT
 GTTGTGTGTGCCTGGTTGCTGTTGCAGCTGTGATTGTCAAGGATCAGCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG207744 representing NM_007437
 Red=Cloning site Green=Tags(s)

MERQVLRRLRQAFRSGRSRPLRFRLQQLAALRRMVQEREKEILAAIAADLSKSELNAYSHEVITILGEIDF
 MLGNLPELASARPAKKNLLTMMDEAYVQPEPLGVVLIIGAWNYPFVLTMQPLVGAIAAGNAAIVKPSLS
 ENTAKILAEELLPQYLDQDLAYIVNGGIPETTELLKQRFDHILYTGNTAVGKIVMEAAAKHLTPVTLELGG
 KSPCYIDRDCDLDVACRRIAWGKYMNCQQTICAPDYILCEASLQNIQVQIKETVKDFYGENIKASPDYE
 RIINLRHFKRLQSLKQKIAFGGEMDEATRYLAPTILTDVDPNSKVMQEEIFGPILPIVSVKNVDEAIN
 F.IINDREKPLALYVFSRNKLIKRVIDEETSSGGVTGNDVIMHFTVNSLPFGGVGASGMGAYHGKYSFDTF
 HQRPCLLKGLKGESVNKLRYPPNSESKVSWAKFFLLKQFNKGRGLMLLFVCLVAVAAIVKDKL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_007437

ORF Size: 1452 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_007437.5](#)

RefSeq Size: 3133 bp

RefSeq ORF: 1455 bp

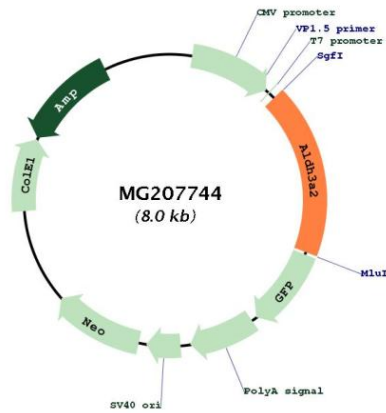
Locus ID: 11671

UniProt ID: [P47740](#)

Cytogenetics: 11 37.96 cM

Gene Summary: Catalyzes the oxidation of medium and long-chain aliphatic aldehydes to fatty acids. Active on a variety of saturated and unsaturated aliphatic aldehydes between 6 and 24 carbons in length (PubMed:25286108). Responsible for conversion of the sphingosine 1-phosphate (S1P) degradation product hexadecenal to hexadecenoic acid (PubMed:25286108). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG207744