

## Product datasheet for **RN213434**

### **Aldh3b1 (NM\_001006998) Rat Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Aldh3b1 (NM_001006998) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Aldh3b1
Synonyms:	MGC95025
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >RN213434 representing NM\_001006998  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGACTCGTTTGAAGATAAGCTTCAGCAGCTGCGAGAGGCCTTCAATGCCGGGAGGACGAGGTCAGCTG  
 AGTTCCGGGCTGCACAGCTGCAAGGCCTGAGCCACTTCCTCAGAGACAACAAACAGCAGCTGCAGGAGGC  
 GCTGGCCCAAGACCTACACAAGTCAGCCTTTGAGTCGGAGGTGTCCGAGATTGCCATCAGTCAGGCTGAG  
 GTGGACCTGGCCCTCAGGAACCTGCGGTCTTGATGAAGGATGAGAAAGTGTCCAAGAATCTGGCCACAC  
 AGCTGGACTCAGCCTTATCCGGAAGGAGCCCTTCGGGCTGGTCTCATCATCGTGCCCTGGAATTACCC  
 CTTGAACCTGACACTCGTGCCTCTGGTGGGGGCCATTGCTGCAGGGAATTGTGTGGTACTCAAACCTCA  
 GAGATCAGCAAGGCCACTGAAAAGATCCTGGCTGAGGTCCTGCCCGCTATCTGGACCAGAGCTGCTTCG  
 CTGTGGTCTGGGTGGCCCTCAGGAACTGGGCAGCTGCTGGAACACAGGTTGACTACATCTTCTTCCAC  
 AGGGAACACTTATGTAGCAAGATCGTCATGGCTGCTGCTGCCAAACACCTGACGCCCATCACCTGGAG  
 CTGGGGGGTAAGAACCCCTGCTATGTGGATGACAACTGCGACCCCGAGACAGTGGCCAACCGTGTGGCCT  
 GGTTCCGCTACTTTAACGCCGGCCAGACCTGTGTGGCCCCGGATTATGTCCTGTGTAGCCAGGAGATGCA  
 GGAGCGGCTGGTCCCGCCCTGCAGAATGCCATCACGCGTTTCTATGGAGACAACCCACAGACCTCCCC  
 AACCTGGGCAGAAATCATCAACAGAAAGCATTTCGAGCGGCTCCAGGGATTGCTGGGCTGTGGCCGTGTGG  
 CCATCGGGGGCCAGAGCGATGAGGGGGAGCGCTACATTGCCCCACAGTGTTAGTGGATGTGCAAGAGAC  
 AGAGCCCGTGATGCAGGAGGAGATCTTTGGACCATCTGCCCTGGTACTGTGACGAACCTGGATGAG  
 GCAATTGAGTTCATCAACCGGAGGGAGAAGCCACTTGCCTGTACGCTTCTCTAAGAGAAGCCAGGTCA  
 TCAAACAGGTGTTGGCCCGACCAGCAGTGGGGCTTCTGCGGGAACGATGGCTTCATGCACATGACCCT  
 GTCCAGCCTTCTTTTGAGGAGTGGGAACAGCGGGATGGGCAGGTACCACGGCAAGTTCTCTCTTTGAC  
 ACCTTTTCCAACAGCGTGCCTGTTTGTGCGCAGCCCTGGGATGGAGAAAATCAACGACCTGCGCTACC  
 CGCCCTACACCAGTCGCAACCTCAGGGTGTGCTGGTGGCCATGGAAAAGAGATGCTGCAGCTGCACGCT  
 GCT**GTA**A

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-RsrII

**ACCN:** NM\_001006998

**Insert Size:** 1407 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\\_001006998.1](#), [NP\\_001006999.1](#)

RefSeq Size: 1913 bp

RefSeq ORF: 1407 bp

Locus ID: 309147

UniProt ID: [Q5XI42](#)

Cytogenetics: 1q43

**Gene Summary:** Oxidizes medium and long chain saturated and unsaturated aldehydes. Metabolizes also benzaldehyde. Low activity towards acetaldehyde and 3,4-dihydroxyphenylacetaldehyde. May not metabolize short chain aldehydes. Can use both NADP(+) and NAD(+) as electron acceptor. May have a protective role against the cytotoxicity induced by lipid peroxidation. [UniProtKB/Swiss-Prot Function]