

Product datasheet for **RN216874**

Aldh7a1 (NM_001271105) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aldh7a1 (NM_001271105) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Aldh7a1
Synonyms:	antiquitin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

Fully Sequenced ORF: >RN216874 representing NM_001271105
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTGCTCTGGCTCGCCCGCTCTGCGTGCAGACTGTGAAGGCCAGCAAACCTTTCCCGCCTTTGGAGTA
 GGCTGCCGCCCTTATGTCTACTCTGCTGATCCATCATCCCAGTATGCCTGGCTGCAAGACCTGGGTCT
 CCGCGAAGATAACGAGGGCGTGTAAATGGAAGCTGGGGCGGCCGGGAGAGTAATTACGACTATTGT
 CCTGCTAAACAATGAGCCAATAGCAAGAGTCCGACAGGCCAGCATGAAAGACTATGAAGAGACTATAGGGA
 AAGCCAAGAAAGCTTGGAACTCTGGGCAGATATCTGCCCCAAAGCGAGGAGAAATAGTCAGAAAGAT
 TGGCGATGCCTTGGGGAGAAGATCCAATTACTGGGAAGACTGGTGTCTTTGGAGATGGGAAAAATCTTA
 GTGGAAGGAATAGGGGAGGTTCCAGGAGTACGTGGACGTCTGCGATTATGCTGCCGGCTTGTGAGGATGA
 TCGGGGGACCCACCTTGCCTCTGAAAGACCCGGCCATGCTCTCATGGAACAGTGAATCCGTTAGGCCCT
 GGTGGGAATCATCACTGCCTTCACTTCCCTGTGGCTGTGTTGGCTGGAACAATGCCATAGCTCTGATC
 ACAGGCAACGTCTGCCTTTGGAAAGGAGACCAACAACCTCCCTCGTTAGTATAGCTGTCAAAAAGATCA
 TAGCCAAGGTTTTGGAGGACAACCTGCTGCCTGGTGCATTTGCTCCCTGACCTGTGGTGGAGCAGATAT
 GGGCACAGCAATGGCCAGAGATGAGCGTGTGAACCTGCTGCTTCACTGGGAGCACTCAGGTGGGGAAG
 CAGGTGGCCCTCATGGTGCAGGAGAGGTTTGGGAAAAGCTTGTGGAGCTCGGAGGAAACAATGCCATCA
 TTGCTTTCGAGGACGCCGACCTCAGCTTGGTCTTCCCTCCGCTCTGTTTCCCGCGTGGGAAACAGCCGG
 CCAGAGGTGTACCACTGTGAGGCGACTGTTTTGCACGAAAGCATCCATGATGAAGTTGTAGACAGACTG
 AAAAAATGCCTACTCACAGATCCGTGTCGGAACCCCTGGGACCCCAATATCTCTATGGACCGCTCCACA
 CCAAACAGGCGGTGAGCATGTTTGTGCAAGCCGTGGAAGAAGCAAAGAAAGAAGGAGGCAGGTGGTCTA
 TGGGGGCAAGGTATGGACCACCTGGCAATTATGTGGAACCCACCATTGTGACTGGTCTTGTCCATGAT
 GCGCCCATTTGTTCAAGGAGACTTTTGCCTCAATTCTCTATGTCTTCAAATTCAAGAATGAAGAAGAGG
 TCTTTGAATGGAACAATGAAGTAAAACAGGACTTTTCGAGTAGTATCTTTACCAAGGATCTGGGAGAAT
 CTTCCGCTGGCTTGGACCTAAGGTTTCAGACTGTGGCATTGTGAACGTCAATATTCCTACCAGCGGGCT
 GAGATCGGCGGTGCGTTTGGAGGCGAGAAGCACACGGCGGTGGCAGGGAATCTGGCAGCGATGCCTGGA
 AGCAGTACATGCGGAGATCTACGTGTACCATCACTACAGCACGGCCCTCCCTCTGGCTCAAGGTATCAA
 GTTTCAG**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001271105
- Insert Size:** 1620 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:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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_001271105.1](#), [NP_001258034.1](#)

RefSeq Size: 1894 bp

RefSeq ORF: 1620 bp

Locus ID: 291450

UniProt ID: [Q64057](#)

Cytogenetics: 18q12.1

Gene Summary: Multifunctional enzyme mediating important protective effects. Metabolizes betaine aldehyde to betaine, an important cellular osmolyte and methyl donor. Protects cells from oxidative stress by metabolizing a number of lipid peroxidation-derived aldehydes. Involved in lysine catabolism (By similarity).[UniProtKB/Swiss-Prot Function]