

Product datasheet for **MC224264**

Aox4 (NM_023631) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Aox4 (NM_023631) Mouse Untagged Clone
Tag: Tag Free
Symbol: Aox4
Synonyms: 2310003G12Rik; Aoh2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224264 representing NM_023631
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCCTCCGTCTCCGAGTCTGACGAGCTGATTTTTTTTGTGAATGGAAAAAGGTCATAGAGAAGAACC
CTGACCCTGAAAAGAATCTACTGTTCTACACCAGGAAAGTTCTCAATCTCACAGGCACTAAGTACAGCTG
TGGAACAGGAGGCTGTGGGGCCTGCACTGTGATGGTGTGAGATATAATCCAAAGACCAGGAAGATCCAC
CACTACCCAGCAACAGCATGCCTGGTGCCCATCTGCTGGTTCATGGAGCAGCCATTACCACAGTGGAAAG
GTGTGGGGAGCATCAAAAAGAGGGTGCACCCAGTGCAGGAACGACTTGCCAAGTGTACAGGCACCCAGTG
TGGCTTCTGCAGCCCTGGGATGGTGTGATGTCCATCTACACACTGCTCAGGAACCACCCGGAGCCGACACCT
GATCAGATCACGGAGGCTCTTGGAGGGAATTTGTGCCGATGCACTGGATATCGACCAATTGTAGAAAGCG
GGAAAACATTCTCCAGAAGTCTACTGTTTGCCAAATGAAGGGATCTGGGAAATGCTGCATGGATCCAGA
TGAGAAGTGTGGAGAGCAGAGAGAAAAAGATGTGTACTAACTGTATAATGAAGATGAGTTCAGCCG
TTTGACCCATCCAGGAACCTATATTTCTCTGAACTGATTAGAATGGCAGAAGATCCAACAAGAGGA
GGCTGACATTTCAAGGAAGAGGACCACCTGGATCATCCCTGTGACACTGAATGACCTCTGGAAGTAA
AGCCAGCTACCCGAAGCCCACTCGTCATGGGGAACACCACAGTGGGACCCGGTATTAATTTAATGAT
GAATTCTATCCAGTTTTATATCCCACTTGGGGTCCAGAACTAAATCTTATGGACACCACAAACAATG
GGGTAACAATAGGAGCAGGATACAGCCTGGCACAGCTTAAAGTACCTTGGATTTTCTGGTATCAGAACA
ACCAAAGGAGAAGACCAAAACCTTTACGCCCTCCAGAAACATCTGAGGACACTTGACGGCCCCAGATT
AGGAATATGGCTACTTTAGGAGGACACACTGCAAGCCGTCCTAATTTTTCTGACCTCAACCTATTTTGG
CAGCTGGAATGTACTACATCAACGTGGTATCTAGAGAAGGAAAAGATCGTCAGCTCCCTTAAATGGCCC
TTTCTGGAGAAGTTGCCTGAGGCTGACTTGAACCCAGAAGAGGTTATCTGTCCATTTTCATTCTTAC
ACTGCTCAGTGGCAGTTTGTGTCAGGACTCCGGTTGGCACAGCGTCAGGAAAATGCCTTTGCTATTGTCA
ATGCTGGTATGAGCGTGGAGTTTGGAAAGGTACAACACGATCAAGGATCTTAAGATGTTCTTTGGAAAG
TGTGCCCCCACTGTGGTCTCTGCAAGTCAAACCTGCAAGCAGCTCATTGGGAGGCAATGGGACGACCAA
ATGCTGAGTGACGCATGCCAGCTGGTCTCGAGGAGATCCGCATCCCACCAGATGCTGAGGGAGGCATGG



[View online »](#)

TGGAGTACCGACGCACCCTCATCATCAGCTTGCTCTTCAAATTCTACCTCAAAGTGCAGCGATGGCTGAA
 TGAAATGGATCCTCAGAAGTTTCTGACATCCCAGGAAAGTTTGTGAGTGCCCTAGATGACTTCCCATA
 GAAACACCCCAAGGAATCCAGATGTTCCAGTGTGTGGATCCCAAACAACCCAGAAAAGATCCAGTTGGGC
 ACCCAATCATGCACCAGTCGGGTATTAACATGCCACAGGGGAAGCTATATTTATTGATGACATGCCTCC
 CATTGACCAAGAACTCTGCCTTGCCGTTGTCACGAGTACCAGGGCCCATGCAAAGATCACATCACTTGAT
 GTATCAGAAGCCCTGGCGTGTCCAGTGTGTTGACGTGATCACAGCTGAGGATGTCCCGGGAGAAAATG
 ATCACAATGGAGAGATTCTTTATGCACAGAGTGAAGTCAATTCGCTGGTGCAGATCATCTGCACCCGTGCC
 TGCTGATACCTACATCCATGCAAAAAGAAGCAGCTAAACGAGTGAAGATTGCTTATGATGACATAGAGCCA
 ACCATTATCACCATAGAGGAAGCCCTAGAACAATTCTTTCTTTCTCCTGAGAAAAAAATTTGAACAAG
 GAAATGTAGACTATGCCTTCAAACATGTGGATCAAATCGTTGAAGGTGAGATCCACGTGGAAGGGCAGGA
 ACACCTTTTACATGGAAACGCAAACCATCTGGCTATCCCACAACTGAAGACAAAGAAAATGGTGTACAC
 TTGGGGACACAGTTTCAACCCACGTGCAGGAATTTGTGTCTGCAGCATTAAATGTCCCAAGGAGCAGGA
 TCGCCTGCCACATGAAAAGAGCTGGAGGAGCATTGGGGGCAAAGTGACCAAGCCTGCTCTACTGGGAGC
 TGTCTGTGCTGTGGCTGCCAACAAGACTGGCCGCCAATCCGCTTCATCCTAGAACGAAGTGATGACATG
 CTGATAACAGCTGGCCGCCACCCACTCCTGGGAAAATACAAAATTTGGGTTTCATGAATAATGGAGAGATCA
 GAGCTGCTGACGTTGAATATTACTACTAATGGAGGATGCACCCCGACGAATCTGAGCTGGTGATAGAATT
 TGTCTGTGCTGAAATCTGAAAATACATATCATATTCGAATTTCCGGTGCCGGGGCAGGGCTTGCAAAAACA
 AACTTACCATCTAACACGGCTTTCCGAGGATTTGGCTTCCCTCAGGCTACGGTGGTCTGCGAAGCATACA
 TCGCTGCGGTAGCATCTAAATGTAACCTTACTCCCTGAAGAGGTTAGAGAAAATAACATGTATAAGAAAAC
 TAGCAAGACAGCCTATAAGCAGACGTTTAAATCCAGAGCCCTTGCAGGATGCTGGAAGGAGTGTCTGGAG
 AAGTCGTCATTTCTTTGCTAGGAAGAAGGCTGCAGAGGAATTTAACGGAACAACCTATTGGAAGAAGAGGG
 GGCTTGTGCTGCTCCCATGAAGTTCAGCGTTGCGGTCCCATAGCCTTCTACAATCAGGCTGCTGCTCT
 GGTCACATCTTCTTAGACGGCTCTGCTGCTGACCCACGGTGGCTGCGAGCTGGGACAAGGCCTACAC
 ACTAAGATGATTAGGTAAGCAGTAGAGAACTCAACGTCCCAAGTCGTACGTGCACTTTTCTGAAACCA
 GCACTACCACAGTGCCCAACTCCGCCTTACTGCGGGTCCATGGGAGCAGATATCAATGGGAAGGCTGT
 ACAGAATGCCTGCCAGATTCTTATGGACCGTCTTCGGCCCATCATCAGGAAAAACCTAAAGGAAAATGG
 GAGGAATGGATTAATAAGGCTTTGAAGAATCCATCAGCCTCTCAGCCACTGGATATTTCAAAGGCTACC
 AGACAAACATGGACTGGAAGAAGGAGGAAGGTGATCCCTACCCATACTATGTCTATGGCGCAGCCTGCTC
 TGAGGTTGAAGTGGACTGTCTGACTGGGGCTCACAGCTCCTGAGGACCGACATCTTCGTGGATGCTGCC
 TTCAGCATTAAACCCTGCCCTGGATATCGGGCAGGTTGAGGGAGCCTTTATCCAAGGCATGGGATTCTACA
 CCACAGAGGAGTTGAAATACTCCCAAAAAGGTGTGCTCTATTCTCGGGGCCAGAAAGACTACAAAATCCC
 CACCATCACTGAGATACCAGAGGAGTTCTATGTCACTCTGGTGCATTCTCGAAATCCCATAGCCATCTAC
 TCATCCAAGGATTGGGTGAGGCTGGGATGTTCTCGGGTCTCAGTTTTATTGGCCATATATGATGCCG
 TGACCACTGCCCGCAAGGAGAGAGGGCTGAGCGACATCTTCCCCTTGAATAGCCAGCAACACCTGAAGT
 GATTTCGCATGGCTGTACGGATCAGTTTACTGAGATGATCCCAGAGATGACCCTTCAACATTACACCT
 TGGTCCATCCACGTGCTTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_023631
- Insert Size:** 4011 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:	<u>NM_023631.2, NP_076120.2</u>
RefSeq Size:	4976 bp
RefSeq ORF:	4011 bp
Locus ID:	71872
UniProt ID:	<u>Q3TYQ9</u>
Cytogenetics:	1 28.97 cM
Gene Summary:	Aldehyde oxidase able to catalyze the oxidation of retinaldehyde into retinoate. Is responsible for the major all-trans-retinaldehyde-metabolizing activity in the Harderian gland, and contributes a significant amount of the same activity in the skin. Is devoid of pyridoxal-oxidizing activity, in contrast to the other aldehyde oxidases. Acts as a negative modulator of the epidermal trophism. May be able to oxidize a wide variety of aldehydes into their corresponding carboxylates and to hydroxylate azaheterocycles.[UniProtKB/Swiss-Prot Function]