

## Product datasheet for MC224263

### Aox3 (NM\_023617) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Aox3 (NM\_023617) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Aox3  
**Synonyms:** 1200011D03Rik; AI326299; Aoh1; Aoh2  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC224263 representing NM\_023617  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGGATCGCC

ATGTCTCCTTCTAAGGAGTCAGATGAGCTTATTTCTTTGTGAATGGAAAAAGGTCACCGAGAGGAATG  
 CAGACCCTGAGGTTAATTTATTGTTCTACTTGAGAAAAGTCATCCGACTCACAGGGACAAAGTATGGCTG  
 TGGAGGAGGTGACTGTGGCGCCTGCACAGTGATGATCTCAAGATACGACCCCATCTCCAAAAGGATCAGT  
 CATTTCTCTGCCACTGCCTGCCTGGTTCCCATCTGCTCTCTCCATGGGGCTGCTGTCACTACAGTAGAAG  
 GCATAGGAAGCACAAAACCAGGATACACCCTGTCCAGGAAAGGATTGCCAAAGGCCATGGTACCCAGTG  
 TGGTTCTGCACTCCCGGGATGGTGATGAGCATCTATACTCTCCTGAGGAACCACCCAGAGCCCTCCACA  
 GAACAGATAATGGAAACCCTGGGCGGGAATCTATGCCGCTGCACTGGATACAGGCCCATTTGGGAGAGTG  
 CGAAAAGTTTCTGCCGAGTTCAACTTGCTGCCAGATGAATGGGAAGGGAAATGTTGCTTGGATGAAGA  
 AAAAAACGAGCCTGAGAGAAAAACAGTGTTCACCAAGTTGTATGAAAAAAGAATTCAGCCCTTG  
 GATCCAACCTCAGGAGCTTATATTTCCACCTGAGCTGATGAGGATGGCCGAGGAGTCCAAAATACAGTTC  
 TGACTTTTCGTGGGAAAGGACTACCTGGATTGCCCCAGGAACCCTAAATGACCTTCTGGAATGAAAAT  
 GAAGCATCCAGCGCTCCAATTGTGATTGGCAACACCTATCTGGGGCTTCATATGAAGTTCACAGACGTA  
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 AATGTGGCCTCCTTAGGTGGTCATATTACAGTAGACTGCCGACCTCTGACCTCAACCCTATTTTGGGCA  
 TAGGCAATTGCATCCTCAATGTTGCCTCAACAGAAGGAATACAGCAAATCCCTCTGAATGATCATTTTCT  
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 GAATGAAAGTCGTTTTCAAGGAGGACACAAACACCATACAGACTTGGGGATCTTATATGGAGGGATTGG  
 TGCCACCCTAATCAGCGCAGATAAGTCCTGCCGCGAGCTGATTGGAAGGTGCTGGGATGAAGAAATGCTG  
 GATGATGCTGGCAAGATGATTTGTGAGGAAGTCTCCCTCTGATGGCAGCCCCTGGAGGGATGGAGGAAT



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ACCGAAAGACTCTTGCCATCAGTTTCCTCTTCATGTTTTACTTAGACGTGTTGAAGCAGTTAAAGACGAG
GGACCCCAACAAGTACCCTGACATCTCACAGAACTCCTACACATTCTGGAAGACTTCCCTTTAACCATG
CCTTATGGGATGCAGTCATTTCCAGGATGTAGACTTCCAACAGCCTCTGCAAGACCAATCGGACGTCCTCA
TCATGCATCAGTCTGGCATTAAACACGCCACAGGAGAGGCAGTATTTTGTGATGATATGTCTGTGTTGCC
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GAGGCCTTGGCGTCACCTGGTGTGGTTGATGTGGTAACAGCTCGAGATGTGCCTGGTACAATGGCAGAG
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GCTCAAACCTGGAAAATGCTTACAAGATCCCAACCTCCGTGTCCGAGGTGCGAGTCTGTAAGACCAACTG
CCTTCCAATACAGCGTTTCGAGGATTTGGCTTTCCCAAGGGGCAATTTGTAACAGAAAACCTGTATGTCCG
CTGTGGCAGCCAAATGCCGTTACCACCAGAGAAGTTTCGAGAGCTAAACATGTACAGAAACAATCGATAG
GACAATCACAAACAAGATTTGACCCAACGAATCTGCTACAGTGTGGGAGGCATGTGTGGAAAATTCT
TCCTACTATAACAGGAAAAAGCTGTGGATGAATTTAACCAACAGAGATTTTGGAAAGAAGAGAGGAATTG
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GATCTACACAGATGGGTCTGTACTAGTTGCTCATGGTGGTGTGAACTGGGACAAGGATTAACACCAAAA
ATGATACAGGTGGCCAGCCGTAATTAAGATACCTATGTCTTATATACACCTGGATGAGATGAGCACTG
TGACCGTCCCAACACGTTACCCTGAGCATCCACCGTGCCGATGTCAACGGGAGAGCTGTTAGAA
TGCCTGTGAGATCCTTATGAAGCGTCTGGAACCCATCATCAAGCAGAATCCTAGTGGTACCTGGGAAGAA
TGGGTTAAGGAAGCTTTTGTTCAAAGCATTAGCCTCTCGGCCACTGGATATTTTAGGGTTACCAAGCTG
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TGAAATGATTGTCTGACGGGAGCTCACAAGAACATTAGAACCAGACATTGTTATGGATGGATCATTCACT
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AGGAACTGAAATATTCACCTGAAGGAGTCTATACACTCGTGGTCCACACAGTACAAAAATGCATCAGT
TACCGACATCCAGAAGAATTCATGTATCACTGTTGACACCAACCCCAACCCAAAAGCCATCTACTCT
TCTAAGGGCCTTGGCGAAGCTGGAACGTTTCTGGGCTGTTCTGTGTTCTTCGCTATTGCCGCGGCCGTGG
CTGCAGCTCGAGAGGAGAGAGGCTTGTCCCAATTTGGGCCATAAACAGCCCTGCCACAGCAGAAGTGAT
CCGCATGGCCTGTGAGGACCAGTTCACGAACCTGGTCCACAAACGGATTCTAAATGCTGTAAGCCGTGG
TCCATCCCAGTTGCC TAG

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AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

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- Restriction Sites:** SgfI-RsrII
- ACCN:** NM\_023617
- Insert Size:** 4008 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\\_023617.2](#), [NP\\_076106.2](#)

**RefSeq Size:** 4360 bp

**RefSeq ORF:** 4008 bp

**Locus ID:** 71724

**UniProt ID:** [G3X982](#)

**Cytogenetics:** 1 28.96 cM

**Gene Summary:** Oxidase with broad substrate specificity, oxidizing aromatic azaheterocycles, such as N1-methylnicotinamide and phthalazine, as well as aldehydes, such as benzaldehyde, retinal and pyridoxal. Plays a key role in the metabolism of xenobiotics and drugs containing aromatic azaheterocyclic substituents. Is probably involved in the regulation of reactive oxygen species homeostasis. May be a prominent source of superoxide generation via the one-electron reduction of molecular oxygen. Also may catalyze nitric oxide (NO) production via the reduction of nitrite to NO with NADH or aldehyde as electron donor.[UniProtKB/Swiss-Prot Function]