OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC323834

D Amino Acid Oxidase (DAO) (NM_001917) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	D Amino Acid Oxidase (DAO) (NM_001917) Human Untagged Clone
Tag:	Tag Free
Symbol:	D Amino Acid Oxidase
Synonyms:	DAAO; DAMOX; OXDA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

```
>OriGene sequence for NM_001917.3
CGGACAGAGGGCTGGAAACAAGACGCTCCAGAATCAGGAGCTTCCCCTCAGGAAATAGCA
TCCTGTGTCCCCGCACTGCAGTTGTCTGGTCTCTCCAGCAGTTTGGTACTTCCGGCTGCT
GCAATGCGTGTGGTGGTGATTGGAGCAGGAGTCATCGGGCTGTCCACCGCCCTCTGCATC
CATGAGCGCTACCACTCAGTCCTGCAGCCACTGGACATAAAGGTCTACGCGGACCGCTTC
ACCCCACTCACCACCACCGACGTGGCTGCCGGCCTCTGGCAGCCCTACCTTTCTGACCCC
AACAACCCACAGGAGGCGGACTGGAGCCAACAGACCTTTGACTATCTCCTGAGCCATGTC
CATTCTCCCAACGCTGAAAACCTGGGCCTGTTCCTAATCTCGGGCTACAACCTCTTCCAT
GAAGCCATTCCGGACCCTTCCTGGAAGGACACAGTTCTGGGATTTCGGAAGCTGACCCCC
AGAGAGCTGGATATGTTCCCAGATTACGGCTATGGCTGGTTCCACACAAGCCTAATTCTG
GAGGGAAAGAACTATCTACAGTGGCTGACTGAAAGGTTAACTGAGAGGGGAGTGAAGTTC
TTCCAGCGGAAAGTGGAGTCTTTTGAGGAGGTGGCAAGAGAAGGCGCAGACGTGATTGTC
AACTGCACTGGGGTATGGGCTGGGGCGCTACAACGAGACCCCCTGCTGCAGCCAGGCCGG
GGGCAGATCATGAAGGTGGACGCCCCTTGGATGAAGCACTTCATTCTCACCCATGACCCA
GAGAGAGGCATCTACAATTCCCCGTACATCATCCCAGGGACCCAGACAGTTACTCTTGGA
GGCATCTTCCAGTTGGGAAACTGGAGTGAACTAAACAATATCCAGGACCACAACACCATT
TGGGAAGGCTGCTGCAGACTGGAGCCCACACTGAAGAATGCAAGAATTATTGGTGAACGA
ACTGGCTTCCGGCCAGTACGCCCCCAGATTCGGCTAGAAAGAGAACAGCTTCGCACTGGA
CCTTCAAACACAGAGGTCATCCACAACTATGGCCATGGAGGCTACGGGCTCACCATCCAC
TGGGGATGTGCCCTGGAGGCAGCCAAGCTCTTTGGGAGAATCCTGGAAGAAAAGAAATTG
TCCAGAATGCCACCATCCCACCTCTGAAGACTCCAGTGACTGCTGCCTCCCCCCACAAGA
ACTCCCTTCTCCCCTCAGCCAATGAATCAATGTGCTCCTTCATAAGCCATTGCTTCTCCC
TCACTTCTTTCCTCAAAGAAGCATGAGGTGAGAGAAAGCCACAAAGTCAGTGCCTGGAGA
AGGGTTCAGCCCAACATGGGGCCCCTCTCATCACTGAAATCCCTCTACCTTCTCTGGGTC
TGGCATTATAAAGAACAGCTGAGGCTGTCATTCCATGAGTCTTCAGAAGAAAGGACAGCT
CAGAAAATCAAAGAGGCCAACTGCCCAGAGCCACAGAAAATGGAGGATAATTGAGGCTAA
GTAACCTGATTACAAGTTGTACTAACATATTAAAGGTTCTGAAAAGTCCTGCAAAAAAAA
AAAAAAAAAAAAAAAA
```

Restriction Sites: ECoRI-NOT

ACCN: NM_001917

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: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001917.3, NP_001908.2
RefSeq Size:	1576 bp
RefSeq ORF:	1044 bp
Locus ID:	1610
UniProt ID:	P14920
Cytogenetics:	12q24.11
Domains:	DAO
Protein Families:	Druggable Genome
Protein Pathways:	Arginine and proline metabolism, D-Arginine and D-ornithine metabolism, Glycine, serine and threonine metabolism, Metabolic pathways
Gene Summary:	This gene encodes the peroxisomal enzyme D-amino acid oxidase. The enzyme is a flavoprotein which uses flavin adenine dinucleotide (FAD) as its prosthetic group. Its substrates include a wide variety of D-amino acids, but it is inactive on the naturally occurring L-amino acids. Its biological function is not known; it may act as a detoxifying agent which removes D-amino acids that accumulate during aging. In mice, it degrades D-serine, a co-agonist of the NMDA receptor. This gene may play a role in the pathophysiology of schizophrenia. [provided by RefSeq, Jul 2008]