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 SC118941

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:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC118941 sequence for NM_001917 edited (data generated by NextGen Sequencing)

ATGCGTGTGGTGGTGATTGGAGCAGGAGTCATCGGGCTGTCCACCGCCCTCTGCATCCAT
GAGCGCTACCACTCAGTCCTGCAGCCACTGGACATAAAGGTCTACGCGGACCGCTTCACC
CCACTCACCACCACCGACGTGGCTGCCGGCCTCTGGCAGCCCTACCTTTCTGACCCCAAC
AACCCACAGGAGGCGGACTGGAGCCAACAGACCTTTGACTATCTCCTGAGCCATGTCCAT
TCTCCCAACGCTGAAAACCTGGGCCTGTTCCTAATCTCGGGCTACAACCTCTTCCATGAA
GCCATTCCGGACCCTTCCTGGAAGGACACAGTTCTGGGATTTCGGAAGCTGACCCCCAGA
GAGCTGGATATGTTCCCAGATTACGGCTATGGCTGGTTCCACACAAGCCTAATTCTGGAG
GGAAAGAACTATCTACAGTGGCTGACTGAAAGGTTAACTGAGAGGGGAGTGAAGTTCTTC
CAGCGGAAAGTGGAGTCTTTTGAGGAGGTGGCAAGAGAAGGCGCAGACGTGATTGTCAAC
TGCACTGGGGTATGGGCTGGGGCGCTACAACGAGACCCCCTGCTGCAGCCAGGCCGGGGG
CAGATCATGAAGGTGGACGCCCCTTGGATGAAGCACTTCATTCTCACCCATGACCCAGAG
AGAGGCATCTACAATTCCCCGTACATCATCCCAGGGACCCAGACAGTTACTCTTGGAGGC
ATCTTCCAGTTGGGAAACTGGAGTGAACTAAACAATATCCAGGACCACAACACCATTTGG
GAAGGCTGCTGCAGACTGGAGCCCACACTGAAGAATGCAAGAATTATTGGTGAACGAACT
GGCTTCCGGCCAGTACGCCCCCAGATTCGGCTAGAAAGAGAACAGCTTCGCACTGGACCT
TCAAACACAGAGGTCATCCACAACTATGGCCATGGAGGCTACGGGCTCACCATCCACTGG
GGATGTGCCCTGGAGGCAGCCAAGCTCTTTGGGAGAATCCTGGAAGAAAAGAAATTGTCC
AGAATGCCACCATCCCACCTCTGA

Clone variation with respect to NM_001917.4

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001917 unedited
AGGATTTGTATACGACTTCTATAGGGCGGCCGCGAATTCGCACGAGGGAGATCCAGCCTC
TCAAACATCCAGCAGAGAGACCATAGGCTGCTGCAATGCGTGTGGTGGTGATTGGAGCAG
GAGTCATCGGGCTGTCCACCGCCCTCTGCATCCATGAGCGCTACCACTCAGTCCTGCAGC
CACTGGACATAAAGGTCTACGCGGACCGCTTCACCCCACTCACCACCACCGACGTGGCTG
CCGGCCTCTGGCAGCCCTACCTTTCTGACCCCAACAACCCACAGGAGGCGGACTGGAGCC
AACAGACCTTTGACTATCTCCTGAGCCATGTCCATTCTCCCAACGCTGAAAACCTGGGCC
TGTTCCTAATCTCGGGCTACAACCTCTTCCATGAAGCCATTCCGGACCCTTCCTGGAAGG
ACACAGTTCTGGGATTTCGGAAGCTGACCCCCAGAGAGCTGGATATGTTCCCAGATTACG
GCTATGGCTGGTTCCACACAAGCCTAATTCTGGAGGGAAAGAACTATCTACAGTGGCTGA
CTGAAAGGTTAACTGAGAGGGGAGTGAAGTTCTTCCAGCGGAAAGTGGAGTCTTTTGAGG
AGGTGGCAAGAGAAGGCGCAGACGTGATTGTCAACTGCACTGGGGTATGGGCTGGGGCGC
TACAACGAGACCCCCTGCTGCAGCCCAGCCCNGGGGCAGATCATGAAAGTGGACGCCCCT
TGGATGAAGCACTTTATTCTCACCCATGACCCCAGAGAGAAGCATCTACCATTCCCCCGT
ACATCATCCCCAGGACCCAGACAGTTACTCTTGGAGGCATCCTCCAGTTGGGAAACTGGA
GTGAACTAAACATATCCAGGACCACACACCATTTGTGGAAGCTGCTGCAGACTGAAGCCC
AACTGAAGATGCCAGATNTATTGGTGACGAACTGGCTTCCTCCCATCC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001917 unedited
CGGCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTGCAGGACTTTTCAGAACCTTT
AATATGTTAGTACAACTTGTAATCAGGTTACTTAGCCTCAATTATCCTCCATTTTCTGTG
GCTCTGGGCAGTTGGCCTCTTTGATTTTCTGAGCTGTCCTTTCTTCTGAAGACTCATGGA
ATGACAGCCTCAGCTGTTCTTTATAATGCCAGACCCAGAGAAGGTAGAGGGATTTCAGTG
ATGAGAGGGGCCCCATGTTGGGCTGAACCCTTCTCCAGGCACTGACTTTGTGGCTTTCTC
TCACCTCATGCTTCTTTGAGGAAAGAAGTGAGGGAGAAGCAATGGCTTATGAAGGAGCAC
ATTGATTCATTGGCTGAGGGGAGAAGGGAGTTCTTGTGGGGGGAGGCAGCAGTCACTGGA
GTCTTCAGAGGTGGGATGGTGGCATTCTGGACAATTTCTTTTCTTCCAGGATTCTCCCAA
AGAGCTTGGCTGCCTCCAGGGCACATCCCCAGTGGATGGTGAGCCCGTAGCCTCCATGGC
CATAGTTGTGGATGACCTCTGTGTTTGAAGGTCCAGTGCGAAGCTGTTCTCTTTCTAGCC
GAATCTGGGGGCGTACTGGCCGGAAGCCAGTTCGTTCACCAATAATTCTTGCATTCTTCA
GTGTGGGCTCCAGTCTGCAGCAGCCTTCCCAAATGGTGTTGTGGTCCTGGATATTGTTTA
GTTCACTCCAGTTTCCCAACTGGAAGATGCCTCCAAGAGTAACTGTCTGGGTCCCTGGGA
TGATGTACGGGGCATTGTAAATGCCTCTCTCTGGCTCATGGGTGAGAATGAAGTGCTTCT
CCCAGGGGCGTCCACCTTCTGATCTGCCCCCGCCTCGCTGANCANGGGGTCTCCGTGTAA
CGCCCCACCCTACCCATGCCAGTGGACATCACTCTGCGCCTCTCTTGCACTCCCAAAAGA
CCCACTTTCGCTGGGAGACTTCCTCCCT

Restriction Sites: ECoRI-NOT

ACCN: NM_001917

Insert Size: 1590 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_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]