

Product datasheet for **RG206768**

D Amino Acid Oxidase (DAO) (NM_001917) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | D Amino Acid Oxidase (DAO) (NM_001917) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | DAO |
| Synonyms: | DAAO; DAMOX; OXDA |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| ORF Nucleotide Sequence: | >RG206768 representing NM_001917 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGTGTGGTGGTATTGGAGCAGGAGTCATCGGGCTGTCCACCGCCCTCTGCATCCATGAGCGCTACC
ACTCAGTCCTGCAGCCACTGGACATAAAGGTCTACGCGGACCGCTTCACCCCACTCACCACCACCGACGT
GGCTGCCGGCCTCTGGCAGCCCTACCTTTCTGACCCCAACAACCCACAGGAGGCGGACTGGAGCCAAACAG
ACCTTTGACTATCTCCTGAGCCATGTCCATTCTCCCAACGCTGAAAACCTGGGCCTGTTCTAATCTCGG
GCTACAACCTCTCCATGAAGCCATTCCGACCCCTTCTGGAAGGACACAGTTCTGGGATTCGGAAGCT
GACCCCAAGAGAGCTGGATATGTTCCAGATTACGGCTATGGCTGGTCCACACAAGCCTAATCTGGAG
GGAAAGAAGTATCTACAGTGGCTGACTGAAAGGTTAACTGAGAGGGGAGTGAAGTTCTTCCAGCGGAAAG
TGGAGTCTTTGAGGAGGTGGCAAGAGAAGGCGCAGACGTGATTGTCAACTGCACTGGGGTATGGCTGG
GGCGCTACAACGAGACCCCTGCTGCAGCCAGGCGGGGGCAGATCATGAAGGTGGACGCCCTTGGATG
AAGCACTTCATTCTACCCATGACCCAGAGAGAGGCATCTACAATTCCCGTACATCATCCAGGGACCC
AGACAGTTACTCTGGAGGCATCTTCCAGTTGGGAACTGGAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT
CACCATTTGGGAAGGCTGCTGCAGACTGGAGCCACACTGAAGAATGAAGAATATTGGTGAACGAAGT
GGCTCCGGCCAGTACGCCCCAGATTCCGGCTAGAAAGAGAACAGCTTCGCACTGGACCTCAAACACAG
AGGTCATCCACAAGTATGGCCATGGAGGCTACGGGCTCACCATCCACTGGGGATGTGCCCTGGAGGCAGC
CAAGCTCTTTGGGAGAATCTGGAAGAAAAGAAATTGTCCAGAATGCCACCATCCACCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG206768 representing NM_001917
 Red=Cloning site Green=Tags(s)

MRVVVIGAGVIGLSTALCIHERYHSVLQPLDIKVVYADRFPLTTTDDVAAGLWQPYLSDPNNPQEADWSQQ
 TFDYLLSHVHSPNAENLGLFLISGYNLFHEAIPDPSWKDVTLVGFRKLTPRELDMFPDYGYGWFHTSLILE
 GKNYLQWLTERLTERGVKFFQRKVESFEEVAREGADVIVNCTGVWAGALQRDPLLQPGRQIMKVDAPWM
 KHFILTHDPERGIYNSPYIIPGTQVTTLGGIFQLGNWSELNNIQDHNTIWECCRLPTLNARIIGERT
 GFRPVRPQIRLEREQRLRTPSNTEVIHNYGHGGYGLTIHWGCALEAAKLFGRILEEKLSRMPPSHL

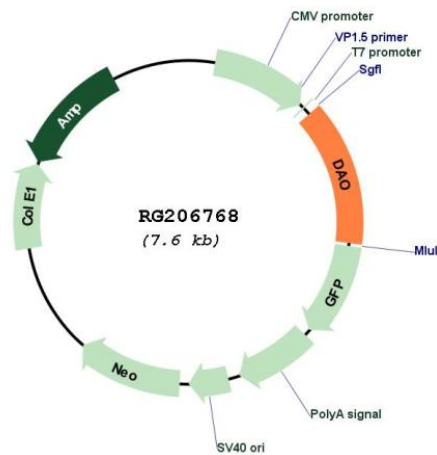
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001917

ORF Size: 1041 bp

| | |
|-------------------------------|--|
| OTI Disclaimer: | The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info |
| OTI Annotation: | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. |
| 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: | NM_001917.5 |
| 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] |