

Product datasheet for RC206768L1

OriGene Technologies, Inc.

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

Product data:

Product Type: Expression Plasmids

Product Name: D Amino Acid Oxidase (DAO) (NM_001917) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: D Amino Acid Oxidase

Synonyms: DAAO; DAMOX; OXDA

Mammalian Cell

Selection:

Vector: pLenti-C-Myc-DDK (PS100064)

None

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

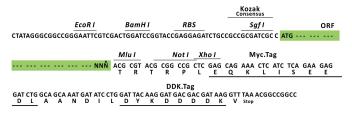
The ORF insert of this clone is exactly the same as(RC206768).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_001917

ORF Size: 1041 bp



D Amino Acid Oxidase (DAO) (NM_001917) Human Tagged Lenti ORF Clone - RC206768L1

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: 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 001917.3</u>

RefSeq Size: 1576 bp
RefSeq ORF: 1044 bp
Locus ID: 1610
UniProt ID: P14920

 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

MW: 39.3 kDa

Gene Summary: This gene encodes the peroxisomal enzyme D-amino acid oxidase. The enzyme is a

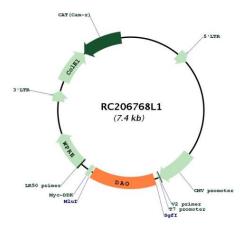
flavoprotein which uses flavin adenine dinucleotide (FAD) as its prosthetic group. Its

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 coagonist of the NMDA receptor. This gene may play a role in the pathophysiology of

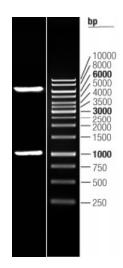
schizophrenia. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC206768L1



Double digestion of RC206768L1 using Sgfl and Mlul