

Product datasheet for **RC212162**

DAOA (NM_172370) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Tag: Myc-DDK
Symbol: DAOA
Synonyms: LG72; SG72
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC212162 representing NM_172370
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTGGAAAAGCTGATGGGTGCTGATTCTCTCCAGCTTTTCAGATCCAGATATACATTGGGTAAAATCT
ACTTCATAGGTTTTCAAAGAGCATTCTTCTGAGCAAATCTGAAAATCTCTAACTCTATTGCAAAGGA
GACAGAAGAAGGAAGAGAGACGGTAACAAGGAAAGAAGGATGGAAGAGAAGGCATGAGGACGGCTATTTG
GAAATGGCACAGAGGCATTTACAGAGATCATTATGTCCTTGGGTCTCTTACCTTCCTCAGCCCTATGCAG
AGCTTGAAGAAGTAAGCAGCCATGTTGGAAAAGTCTTCATGGCAAGAACTATGAGTTCCTTGCCTATGA
GGCCTCTAAGGACCGCAGGCAGCCTCTAGAACGAATGTGGACCTGCAACTACAACCAGCAAAAAGACCAG
TCATGCAACCACAAGGAATAACTTCTACCAAAGCTGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212162 representing NM_172370
Red=Cloning site Green=Tags(s)
MLEKLMGADSLQLFRSRYTLGKIYFIGFQKSILLSKSENSLSIAKETEEGRETVTRKEGWKRRHEDGYL
EMAQRHLQRSLCPWVSYPYPYAELEEVS SHVGKVF MARNYEF LAYEASKDRRQPLERMWTCNYNQKQDK
SCNHKEITSTKAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6243_e08.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_172370

ORF Size: 459 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:

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_172370.2](#), [NP_758958.2](#)

RefSeq Size: 742 bp

RefSeq ORF: 462 bp

Locus ID: 267012

UniProt ID: [P59103](#)

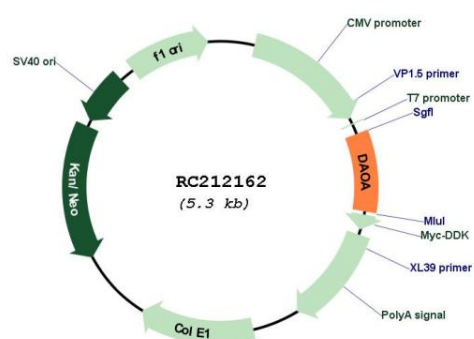
Cytogenetics: 13q34

Protein Families: Druggable Genome

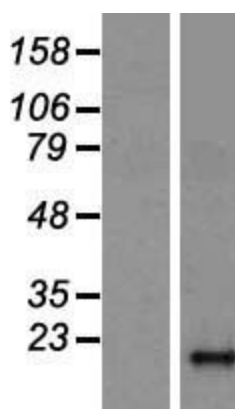
MW: 17.9 kDa

Gene Summary: This gene encodes a protein that may function as an activator of D-amino acid oxidase, which degrades the gliotransmitter D-serine, a potent activator of N-methyl-D-aspartate (NMDA) type glutamate receptors. Studies also suggest that one encoded isoform may play a role in mitochondrial function and dendritic arborization. Polymorphisms in this gene have been implicated in susceptibility to schizophrenia and bipolar affective disorder. Alternatively spliced transcript variants encoding different isoforms have been identified.[provided by RefSeq, Mar 2011]

Product images:



Circular map for RC212162



Western blot validation of overexpression lysate (Cat# [LY406698]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212162 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).