

## Product datasheet for MR229387

### Dao (NM\_001286396) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Dao (NM_001286396) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dao
Synonyms:	AI987963; DAAO; DAMOX; Dao-1; Dao1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR229387 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGCGTGGCCGTGATCGGAGCAGGAGTCATTGGGCTCTCCACAGCCCTCTGCATTCATGAGCGTTACC  
ACCCAACACAGCCACTGCACATGAAGATCTATGCAGATCGATTACCCCGTTACCACGAGCGATGTGGC  
CGCCGGCCTCTGGCAGCCTTATCTCTGACCCAGCAACCTCAGGAGGCGGAGTGGAGCCAGCAAACG  
TTTGATTACCTGCTGAGCTGCCTCCATTCTCAAACGCTGAAAAAATGGCCTGGCCCTAATCTCAGGCT  
ACAACCTCTTCGAGATGAAGTCCGGACCCTTCTGAAAAACGCAGTTCTGGGATTCGGAAGCTGAC  
CCCCAGTGAGATGGACCTGTTCCCTGATTATGGCTACGGCTGGTTCAATACAAGCCTCCTCTAGAGGGG  
AAGAGCTACCTGCCATGGCTAACTGAGAGGTTAACTGAGAGGGGAGTGAAGCTTATCCATCGGAAGGTGG  
AGTCTCTCGAAGAGGTGGCAAGAGGAGTGGATGTGATTCAACTGCACCGGGGTGTGGCCGGGCCCT  
GCAAGCAGATGCCTCCCTGCAGCCAGGCCGGGGCCAGATCATCCAGTGGAGGCCCTTGGATTAACAC  
TTCATCTCACCCATGATCCTAGCCTTGGTATCTAACTCTCCGTACATCATCCAGTTCCAAGACAG  
TTACGCTCGGGGTATATTCCAGCTGGGAACTGGAGCGGGTAAACAGCGTCCGTGACCACAATACCAT  
TTGGAAGAGCTGCTGAACTGGAGCCACCCTGAAGAATGCAAGAATTGGGTGAACCTCACTGGCTTC  
CGGCCAGTCCGGCCTCAGTCCGGTAGAAAGAGAATGGCTTCATTTGGATCTTCAAGTGCAGAGGTCA  
TCCACAACATATGGTCATGGAGGTTACGGGCTCACAATCCACTGGGGTTGTGCAATGGAGGCGCCAACT  
CTTCGGGAAAATTCTAGAGGAAAAGAAGTTGTCCAGTTGCCTCCCTCCACCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR229387 protein sequence  
Red=Cloning site Green=Tags(s)

MRVAVIGAGVIGLSTALCIHERYHPTQLHMKIYADRFTPTTSDVAAGLWQPYLSDPSNPQEAWSQQT  
 FDYLLSCLHSPNAEKMLGALISGYNLF RDEVPDPFWKNAVLGFRKLT PSEMDLFPDYGYGWFNTSLLLEG  
 KSYLPWLTERRLTERGVKLIHRKVESLEEVARGV DVIINCTGVWAGALQADASLQ PGRGQIIQVEAPWIKH  
 FILTHDPSLGIYNSPYIIPGSKTVTLGGIFQLGNWSGLNSVRDHNTIWKSCCKLEPTLKNARIVGELTGF  
 RPVVRPQVRLREWLHFGSSSAEVIHNYGGYGLTIHWGCAMEAANLFGKILEEKLSRLPPSHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001286396

**ORF Size:** 1038 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.

**RefSeq:** [NM\\_001286396.1](#), [NP\\_001273325.1](#)

**RefSeq Size:** 1859 bp

**RefSeq ORF:** 1038 bp

**Locus ID:** 13142

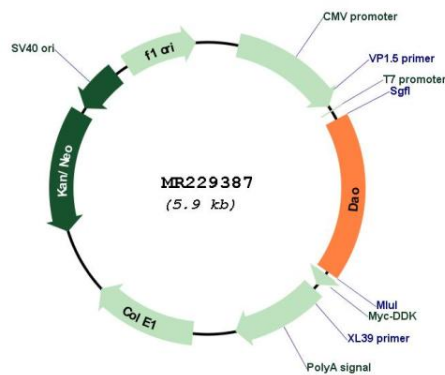
**UniProt ID:** [P18894](#)

**Cytogenetics:** 5 55.93 cM

**MW:** 38.7 kDa

**Gene Summary:** Regulates the level of the neuromodulator D-serine in the brain. Has high activity towards D-DOPA and contributes to dopamine synthesis. Could act as a detoxifying agent which removes D-amino acids accumulated during aging. Acts on a variety of D-amino acids with a preference for those having small hydrophobic side chains followed by those bearing polar, aromatic, and basic groups. Does not act on acidic amino acids.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR229387