

Product datasheet for **MG205200**

Dao (NM_010018) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dao (NM_010018) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dao
Synonyms:	AI987963; DAAO; DAMOX; Dao-1; Dao1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG205200 representing NM_010018 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGCGTGGCCGTGATCGGAGCAGGAGTCATTGGGCTCTCCACAGCCCTCTGCATTATGAGCGTTACC
ACCCAACACAGCCACTGCACATGAAGATCTATGCAGATCGATTACCCCGTTACCACGAGCGATGTGGC
CGCCGGCCTTGGCAGCCTTATCTCTGACCCAGCAACCTCAGGAGGCGGAGTGGAGCCAGCAAACG
TTTGATTACCTGCTGAGCTGCCTCCATTCTCAAACGCTGAAAAAATGGCCTGGCCCTAATCTCAGGCT
ACAACCTCTTCGAGATGAAGTTCGGACCTTTCTGAAAAACGCAGTTCTGGGATTCCGGAAGCTGAC
CCCAGTGAGATGGACCTGTTCCCTGATTATGGCTACGGCTGGTTCAATACAAGCCTCCTCTAGAGGGG
AAGAGCTACCTGCCATGGCTAACTGAGAGGTTAACTGAGAGGGGAGTGAAGCTTATCCATCGGAAGTGG
AGTCTCTCGAAGAGGTGGCAAGAGGAGTGGATGTGATTCAACTGCACCGGGGTGTGGCCGGGCCCT
GCAAGCAGATGCCTCCCTGCAGCCAGGCCGGGCCAGATCATCCAGTGGAGGCCCTTGGATTAACAC
TTCATCTCACCCATGATCCTAGCCTTGGTATCTAACTCTCCGTACATCATCCAGTTCCAAGACAG
TTACGCTCGGGGTATATTCCAGCTGGGAACTGGAGCGGGTAAACAGCGTCCGTGACCACAATACCAT
TTGGAAGAGCTGCTGAACTGGAGCCACCCTGAAGAATGCAAGAATTGGGTGAACCTCACTGGCTTC
CGGCCAGTCCGGCCTCAGTCCGGCTAGAAAGAGAATGGCTTCATTTGGATCTTCAAGTGCAGAGGTCA
TCCACAACATATGGTCATGGAGGTTACGGGCTCACAATCCACTGGGGTTGTGCAATGGAGGCGCCAACCT
CTTCGGGAAAATTCTAGAGGAAAAGAAGTTGTCCAGTTGCCTCCCTCCACCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG205200 representing NM_010018
 Red=Cloning site Green=Tags(s)

MRVAVIGAGVIGLSTALCIHERYHPTQPLHMKIYADRFTPFSTSDVAAGLWQPYLSDPSPNQEAWSQQT
 FDYLLSCLHSPNAEKMLGALISGYNLFREVPDPFWKNAVLGFRKLTPEMDLFPDYGYGWFNTSLLLEG
 KSYLPWLTERLTERGVKLIHRKVESLEEVARGVDVIINCTGVWAGALQADASLQPRGQIIQVEAPWIKH
 FILTHDPSLGIYNSPYIIPGSKTVTLGGIFQLGNWSGLNSVRDHNTIWKSCCKLEPTLKNARIVGELTGF
 RPVVRPQRLEREWLHFGSSSAEVIHNYGHGGYGLTIHWGCAMEAANLFGKILEEKLSRLPPSHL

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1876_b08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_010018

ORF Size: 1035 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_010018.3](#)

RefSeq Size: 1712 bp

RefSeq ORF: 1038 bp

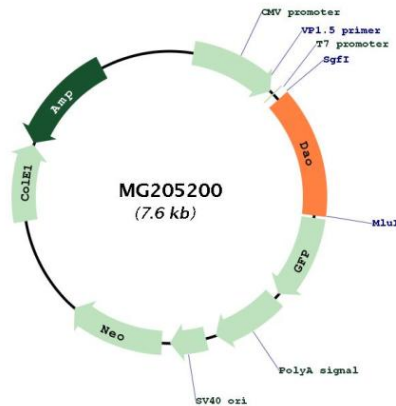
Locus ID: 13142

UniProt ID: [P18894](#)

Cytogenetics: 5 55.93 cM

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 MG205200