

Product datasheet for **MR203164**

DaoI (BC015269) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	DaoI
Synonyms:	DAO
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >MR203164 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGCGCGTGGCCGTGATCGGAGCAGGAGTCATTGGGCTCTCCACAGCCCTCTGCATTATGAGCGTTACC
ACCCAACACAGCCACTGCACATGAAGATCTATGCAGATCGATTACCCCGTTACACAGAGCGATGTGGC
CGCCGGCTCTGGCAGCCTTATCTCTGACCCAGCAACCCTCAGGAGCGGAGTGAGCCAGCAAACG
TTTGATTACCTGCTGAGCTGCCTCCATTCTCCAACGCTGAAAAATGGCCTGGCCCTAATCTCAGGCT
ACAACCTCTCCGAGATGAAGTTCGGACCTTTCTGGAAAAACGAGTTCTGGGATTCCGGAAGCTGAC
CCCCAGTGAGATGGACCTGTTCCCTGATTATGGCTACGGCTGGTTCAATACAAGCCTCCTTCTAGAGGGG
AAGAGCTACCTGCCATGGCTAACTGAGAGGTTAACTGAGAGGGGAGTGAAGCTTATCCATCGGAAGGTGG
AGTCTCTCGAAGAGGTGGCAAGAGGAGTGATGTGATTATCAACTGCACCGGGGTGTGGCCGGGCCCT
GCAAGCAGATGCCCTCCCTGCAGCCAGGCCGGGCCAGATCATCCAGGTGGAGGCCCTTGATTAAACAC
TTCATCCTCACCATGATCCTAGCCTTGGTATCTACAACCTCTCCGTACATCATCCAGGAATGCAAGAAT
TGTGGGTGAATCACTGGCTTCCGGCCAGTCCGGCCTCAGGTCCGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence:

>MR203164 protein sequence
Red=Cloning site Green=Tags(s)

MRVAVIGAGVIGLSTALCIHERYHTPQLHMKIYADRFTPTTSDVAAGLWQPYLSDPSNPQEAWSQQT
FDYLLSCLHSPNAEKMGLALISGYNLFRDEVPDFWKNVAVLGRKLTPEMDLFPDYGYGWFNLSLLEGG
KSYLPWLTERLTERGVKLIHRKVESLEEVARGVVDIINCTGVWAGALQADASLQPGRGQIIQVEAPWIKH
FILTHDPSLGIYNSPYIIPGMOELWVNSLASGOSGLRSG

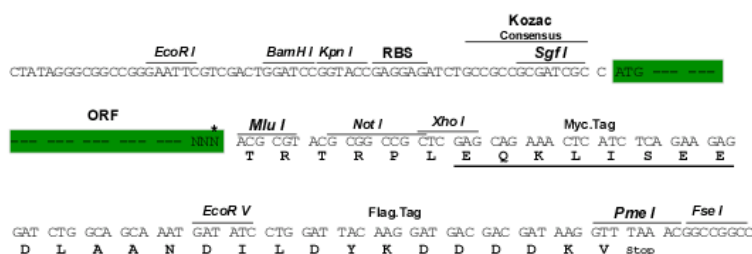
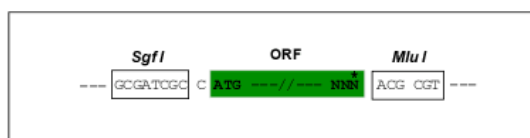
TRTRPLEOKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN:

BC015269

ORF Size:

747 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:

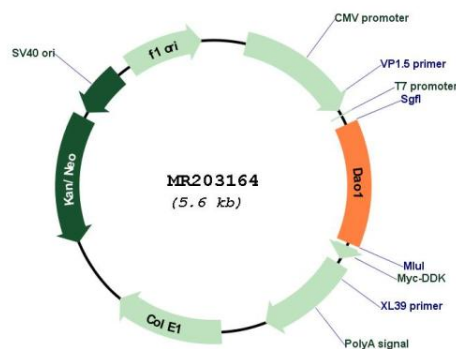
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>BC015269</u> , <u>AAH15269</u>
RefSeq Size:	1537 bp
RefSeq ORF:	749 bp
Locus ID:	13142
Cytogenetics:	5 55.93 cM
MW:	27.8 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 MR203164