

Product datasheet for **MR227463**

Cyp21a1 (NM_009995) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cyp21a1 (NM_009995) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cyp21a1
Synonyms:	21-OH; 21OH; 21OHA; 21OHB; Cyp21; Cyp21-ps1; Cyp21a2-ps; Cyp21a2ps; Cyp21B; CYP21OH-A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR227463 representing NM_009995
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGCTACCTGGGCTGCTGCTGCTGTTGCTGCTGCTAGCTGGCACCCGCTGGCTGTGGGGCCAATGGA
 AGCTCCGGAAGCTGCACCTCCCGCCTCTGGCCCCGGGTTTTCTGCACTTCTACAGCCTAACCTTCCCAT
 CTACCTGCTTGGCCTCACTCAGAACTCGGGCCCATCTACAGGATCCGCTTGGGGATGCAAGATGTGGTG
 GTGCTAAATTCTAACAGAACCATTGAGGAGGCCTTGATCCAAAAGTGGGTGGACTTTGCTGGCCGACCCC
 ATATGCTAAATGGAAAGATGGACTTGGACCTGTCCCTGGGGGATTACTCTCTCATGTGGAAGGCCACAA
 GAAACTCTCTCGCTCAGCCCTGATGCTGGGCATGCGAGACTCCATGGAGCCTCTGATAGAGCAGCTGACC
 CAGGAGTTCTGTGAGCGCATGCGAGCCAGGCTGGCACCCCGTGGCCATCCATAAGGAATTCTCCTTCC
 TCACTTGTAGTATCATCTCCTGCCTCACTTTTGGAGACAAGGACAGCACGTTGGTACAGACCCCTTACGA
 CTGTGTCCAGGACTTGTGCAAGCCTGGAACCACTGGTCCATCCAAATCTTGACGATAATCCCCCTTCTC
 AGGTTCTCCCCAACCCAGGCCTCCAGAAGCTGAAGCAGATCCAAGAGAGTCGGGACCATATTGTCAAGC
 AGCAGCTGAAGCGGCACAAGGACAGCCTGGTTGCAGGCCAATGGAAGACATGATTGACTACATGCTCCA
 GGGAGTGGAGAAGCAAAGGGATGGCAAAGACGAAGAGCGGCTCCACGAGGGGCACGTGCACATGTCGGTG
 GTGGACCTGTTTCATCGGCGGCACCGAGACCACGGCTACCACGCTCTCCTGGGCTGTGGCTTTCCTGCTTC
 ACCACCTGAGATCCAGAAGCGACTGCAGGAAGAGTTAGACCTCAAGCTGGGCCACAGGCTCCAGCTCCT
 GTACAGGAACCGAATGCAGCTGCCTCTGCTCATGGCCACCATTGCCGAGGTGTCGCTTTCGGCCCTGTG
 GTGCCCTTGGCCTTGGCCCATCGTGCAACTAGGGCTAGCAGCATCTCCGGCTATGACATCCCTAAGGATA
 TGGTCATCATCCCAACATCCAAGGCGCAACCTGGATGAGATGGTTTGGGAAGTCCCGACGAAGTTCTG
 GCCAGATCGCTTCTGGAACCTGGGAAGAATCCAGAACACCATCCTTTGGCTGTGGGGCACGCGTGTGC
 CTGGGAGAGCCTCTGGCAGGCTGGAGCTCTTTGTGGTGTGGCTCGTCTGCTGCAGGCCTTCACTCTGC
 TGCCTCCACCAGATGGAACCTGCCTTCCCTGCAGCCCCAGCCTTATGCTGGCATCAATCTCCCGATTCC
 TCCTTTCCAGGTGCGGCTGCAGCCAGAAACCTGGCGCCCCAAGACCAGGGTGAGCGTCT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR227463 representing NM_009995
 Red=Cloning site Green=Tags(s)

MLLPGLLLLLLLLAGTRWLWGQWKLRLHLPPLAPGFLHFLQPNLPIYLLGLTQKLGPIYRIRLGMQDVV
 VLNSNRTIEEALIQKWVDFAGRPHMLNGKMDLDSLGDYSLMWKAHKLSRSALMLGMRDSMEPLIEQLT
 QEFCEMRMQAGTPVAIHKEFSFLTCSIISCLTFGDKDSTLVQTLHDCVQDLLQAWNHWISIILTIIPLL
 RFLPNPGLQKLKQIQESRDHIVKQQLKRHKDSL VAGQWKMDIDYMLQGVEKQRDGKDEERLHEGHVHMSV
 VDLFIGGTETTATLSWAVAFLLHHPETQRLQEELDLKLGPGSQLLYRNRMLPLLMATIAEVLRLRPV
 VPLALPHRATRASSISGYDIPKDMVIIPNIQGANLDEMVELPSKFWPDRFLEPGKNRPTSPFGCGARVC
 LGEPLARLELFVVLARLLQAFTLLPPPDGTLPSLQPQPYAGINLPIPPFQVRLQPRNLAPQDQGERP

SGPTRRRLE**QKLI**SEEDLA**ANDILDYKDDDDKV**

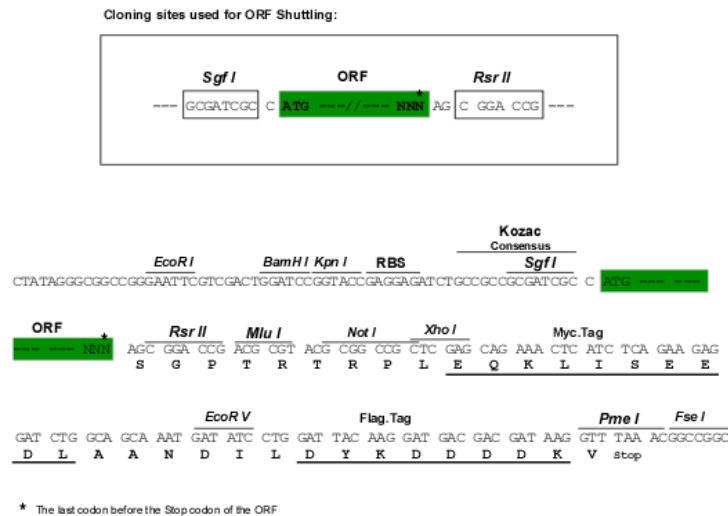
Chromatograms:

https://cdn.origene.com/chromatograms/ja1879_e08.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:



ACCN: NM_009995

ORF Size: 1461 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

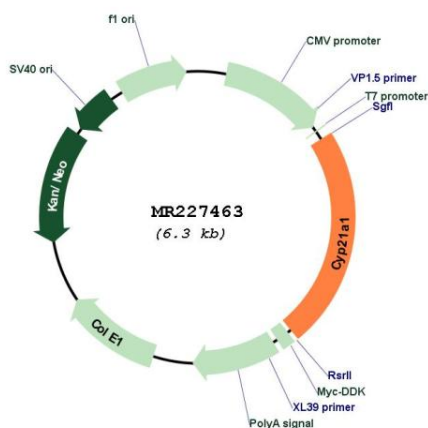
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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>NM_009995.2, NP_034125.2</u>
RefSeq Size:	1939 bp
RefSeq ORF:	1464 bp
Locus ID:	13079
UniProt ID:	<u>P03940</u>
Cytogenetics:	17 18.36 cM
MW:	55.8 kDa
Gene Summary:	Specifically catalyzes the 21-hydroxylation of steroids. Required for the adrenal synthesis of mineralocorticoids and glucocorticoids.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR227463