

Product datasheet for **MG227463**

Cyp21a1 (NM_009995) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cyp21a1 (NM_009995) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cyp21a1
Synonyms:	21-OH; 21OH; 21OHA; 21OHB; Cyp21; Cyp21-ps1; Cyp21a2-ps; Cyp21a2ps; Cyp21B; CYP21OH-A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG227463 representing NM_009995
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGCTACCTGGGCTGCTGCTGCTGTTGCTGCTGCTAGCTGGCACCCGCTGGCTGTGGGGCCAATGGA
 AGCTCCGGAAGCTGCACCTCCCGCCTCTGGCCCCGGGTTTTCTGCACTTCTACAGCCTAACCTTCCCAT
 CTACCTGCTTGGCCTCACTCAGAACTCGGGCCCATCTACAGGATCCGCTTGGGGATGCAAGATGTGGTG
 GTGCTAAATTCTAACAGAACCATTGAGGAGGCCTTGATCCAAAAGTGGGTGGACTTTGCTGGCCGACCCC
 ATATGCTAAATGGAAAGATGGACTTGGACCTGTCCCTGGGGGATTACTCTCTCATGTGGAAGGCCACAA
 GAACTCTCTCGCTCAGCCCTGATGCTGGGCATGCGAGACTCCATGGAGCCTCTGATAGAGCAGCTGACC
 CAGGAGTTCTGTGAGCGCATGCGAGCCAGGCTGGCACCCCGTGGCCATCCATAAGGAATTCTCCTTCC
 TCACTTGTAGTATCATCTCCTGCCTCACTTTTGGAGACAAGGACAGCACGTTGGTACAGACCCTTACGGA
 CTGTGTCCAGGACTTGTGCAAGCCTGGAACCACTGGTCCATCCAAATCTTGACGATAATCCCCCTTCTC
 AGGTTCTCCCCAACCCAGGCCTCCAGAAGCTGAAGCAGATCCAAGAGAGTCGGGACCATATTGTCAAGC
 AGCAGCTGAAGCGGCACAAGGACAGCCTGGTTGCAGGCCAATGGAAGACATGATTGACTACATGCTCCA
 GGGAGTGGAGAAGCAAAGGGATGGCAAAGACGAAGAGCGGCTCCACGAGGGGCACGTGCACATGTCGGTG
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 ACCACCCTGAGATCCAGAAGCGACTGCAGGAAGAGTTAGACCTCAAGCTGGGCCCAGGCTCCCAGCTCCT
 GTACAGGAACCGAATGCAGCTGCCTCTGCTCATGGCCACCATTGCCGAGGTGCTGCGTTTGGCGCCTGTG
 GTGCCCTTGGCCTTGGCCCATCGTGCAACTAGGGCTAGCAGCATCTCCGGCTATGACATCCCTAAGGATA
 TGGTCATCATCCCAACATCCAAGCGCCAACCTGGATGAGATGGTTTGGGAAGTCCCGACGAAGTTCTG
 GCCAGATCGCTTCTGGAACCTGGGAAGAATCCAGAACACCATCCTTTGGCTGTGGGGCACGCGTGTGC
 CTGGGAGAGCCTCTGGCACGGCTGGAGCTCTTTGTGGTGTGGCTCGTCTGCTGCAGGCCTTCACTCTGC
 TGCCTCCACCAGATGGAACCTGCCTTCCCTGCAGCCCCAGCCTTATGCTGGCATCAATCTCCGATTCC
 TCCTTTCCAGGTGCGGCTGCAGCCAGAAACCTGGCGCCCCAAGACCAGGGTGAGCGTCCT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG227463 representing NM_009995
 Red=Cloning site Green=Tags(s)

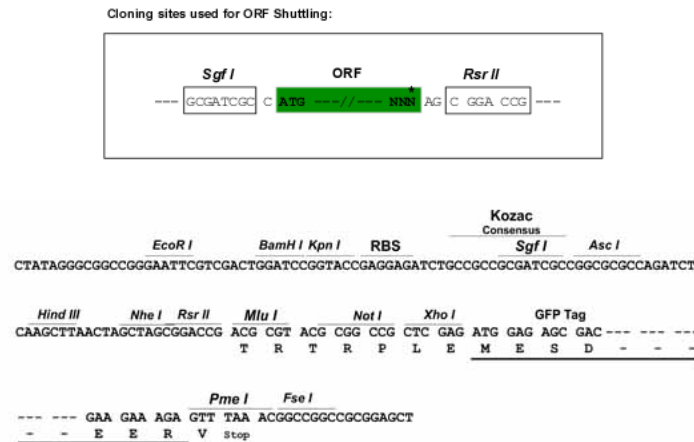
MLLPGLLLLLLLLAGTRWLWGQWKLRLHLPPLAPGFLHFLQPNLPIYLLGLTQKLGPYIRLGMQDVV
 VLNSNRTIEEALIQKWVDFAGRPHMLNGKMDLDLSLDYSLMWKAHKKLSRSALMLGMRDSMEPLIEQLT
 QEFCEMRQAQAGTPVAIHKEFSFLTCSIIISCLTFGDKDSTLVQTLHDCVQDLLQAWNHWISIILTIIPLL
 RFLPNPGLQKLKQIQESRDHIVKQQLKRHKDSL VAGQWKMDIDYMLQGVEKQRDGKDEERLHEGHVHMSV
 VDLFIGGTETTATLSWAVAFLLHHPETQRLQEELDLKLGPGSLLYRNRMLPLMATIAEVLRLRPV
 VPLALPHRATRASSISGYDIPKDMVIIPNIQGANLDEMVELPSKFWPDRFLEPGKNRPTPSFGCGARVC
 LGEPLARLELFVVLARLLQAFTLLPPPDGTLPSLQPPYAGINLPPIPFQVRLQPRNLAPQDQGERP

SGPTRRRLE – GFP Tag – V

Restriction Sites:

SgfI-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.

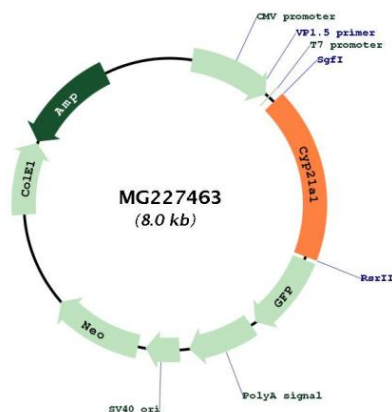
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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:	NM_009995.2 , NP_034125.2
RefSeq Size:	1939 bp
RefSeq ORF:	1464 bp
Locus ID:	13079
UniProt ID:	P03940
Cytogenetics:	17 18.36 cM
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 MG227463