

Product datasheet for **RC223201**

Cytochrome P450 4A (CYP4A11) (NM_000778) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Cytochrome P450 4A (CYP4A11) (NM_000778) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Cytochrome P450 4A |
| Synonyms: | CP4Y; CYP4A2; CYP4A11; CYP4A11 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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ORF Nucleotide Sequence:

>RC223201 representing NM_000778
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGTGTCTCTGTGCTGAGCCCCAGCAGACTCCTGGGTGATGTCTCTGGAATCCTCCAAGCGCCCTCCC
 TGCTATTCTGCTTCTGCTGCTGATCAAGGCAGTTCAGCTCTACCTGCACAGGCAGTGGCTGCTCAAAGC
 CCTCCAGCAGTTCCTCGTCCCTCCCTCCCACTGGCTCTTCGGGCACATCCAGGAGCTCCAACAGGACCAG
 GAGCTACAACGGATTAGAAAATGGGTGGAGACATCCCAAGTGCCTGTCCTATTGGCTATGGGGAGGCA
 AAGTTCGTGTCCAGCTCTATGACCCTGACTATATGAAGGTGATTCTGGGGAGATCAGACCCGAAATCCCA
 TGGTTCCTACAGATTCTGGCTCCATGGATTGGGTACGGCTTCTCTGTTGAATGGGCAGACATGGTTC
 CAGCATCGACGGATGCTGACCCAGCCTCCACTATGACATCCTGAAGCCCTATGTGGGGCTCATGGCAG
 ACTCTGTACGAGTGTGTTGACAAAATGGGAAGAGCTCCTTGCCAGGATCCCCTCTGGAGGTCTTTCA
 GCAGTCTCCTTGATGACCCTGGACACCATCATGAAGTGTGCCTCAGCCATCAGGGCAGCATCCAGGTG
 GACAGGAATTCTCAGTCTACATACAGGCCATTAGTGACCTGAACAACCTGGTTTTTTCCCGTGTGAGGA
 ATGCCTTTACCCAGAATGACACCATCTACAGCCTGACCTCTGCTGGCCGCTGGACACACCCGCGCTGCCA
 GCTGGCCCATCAGCACACAGACCAAGTATCCAAGTGGAGGAGCTCAACTACAGAAGGAGGGGGAGCTG
 GAGAAGATCAAGAGGAAGAGGCATTTGGATTTTCTGGATATCCTCCTCTTGCCAAAATGGAGAATGGGA
 GCATCTTGTGAGCAAGGACCTCCGTGCTGAGGTGGACACGTTTATGTTTGGGGCCATGACACACAGC
 CAGTGGGATCTCCTGGATCCTCTATGCTCTGGCCACACACCCCAAGCATCAGGAGAGGTGCCGGGAGGAG
 ATCCACAGCCTCCTGGGTGATGGAGCCTCCATCACCTGGAACACCTGGACCAGATGCCCTACACACCA
 TGTGCATTAAGGAGGCACTGAGGCTCTACCCACGGTGCCAGGCATTGGCAGAGAGCTCAGCACTCCCGT
 CACCTTCCCTGATGGGCGCTCCTTGCCAAAGGTATCATGGTCCCTCTCCATTTATGGCCTTACCAC
 AACCCAAAAGTGTGGCCAAACCCAGAGGTGTTGACCCTTCCGTTTTGACCCGGTTCTGCTCAACACA
 GCCACGCTTCTGCCCTTCTCAGGAGGATCAAGGAACCTGCATCGGGAAACAATTTGCCATGAACGAGCT
 GAAGGTGGCCACGGCCCTGACCCTGCTCCGCTTTGAGCTGCTGCCTGATCCCACCAGGATCCCCATCCCC
 ATTGACGACTTGTGTTGAAATCCAAAATGGAATCCACCTGCGTCTCAGGAGGCTCCCTAACCTTGTG
 AAGACAAGGACCAGCTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223201 representing NM_000778
 Red=Cloning site Green=Tags(s)

MSVSVLSPSRLLGDVSGILQAASLLILLLLL IKAVQLYLHRQWLLKALQQFPCPPSHWLFHQIQLQDDQ
 ELQRIQKWVETFPSACPHWLWGGKVRVQLYDPDYMKVILGRSDPKSHGSYRFLAPWIGYGLLLLNGQTFW
 QHRRMLTPAFHYDILKPYVGLMADSVRVMLDKWEELLGQDSPLEVFQHVSLMTLDTIMKCAFHQSGSIQV
 DRNSQSYIQAIISDLNVLVSRVRNAFHQNDIYSLTSAGRWTHRACQLAQHTDQVIQLRKAQLQKEGEL
 EKIKRKRHLDFLDILLAKMENGSIKDLRAEVDTFMFEHDTTASGISWILYALATHPKHQERCREE
 IHSLLDGASITWNHLDQMPYTTMCIKEALRLYPPVPGIGRELSTPVTFPDGRSLPKGIMVLLSIYGLHH
 NPKVWPNEVDFPFRFAPGSAQHSFAFLPFGSSRNCIGKQFAMNELKVATALTLRFFELLDPDTRIP
 IARLVLKSNGIHLRLRRLPNPCEDKDQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6476_g12.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_000778

ORF Size: 1557 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.

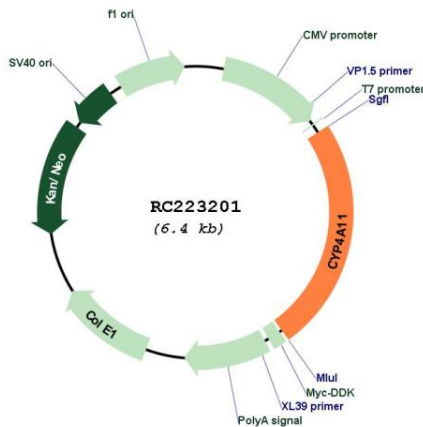
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

RefSeq: [NM_000778.4](#)

| | |
|-------------------|--|
| RefSeq Size: | 2815 bp |
| RefSeq ORF: | 1560 bp |
| Locus ID: | 1579 |
| UniProt ID: | Q02928 |
| Cytogenetics: | 1p33 |
| Domains: | p450 |
| Protein Families: | Druggable Genome, P450, Transmembrane |
| Protein Pathways: | Arachidonic acid metabolism, Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway, Retinol metabolism, Vascular smooth muscle contraction |
| MW: | 59.2 kDa |
| Gene Summary: | This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and hydroxylates medium-chain fatty acids such as laurate and myristate. Multiple transcript variants have been found for this gene. [provided by RefSeq, Jan 2016] |

Product images:



Circular map for RC223201