

Product datasheet for **RC204606**

CYP4B1 (NM_000779) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP4B1 (NM_000779) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYP4B1
Synonyms:	CYPIVB1; P-450HP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC204606 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTGCCAGCTTCTCTCCCTGAGCTTCTCTCTTGGCCTGTGGGCTTCTGGGCTGATCTTGGTCT
 TAGGCTTTCTCAAGCTCATCCACCTGCTGCTGCGGAGGCAGACGTTGGCTAAGGCTATGGACAAATTC
 AGGGCCTCCACCCACTGGCTTTTTGGACATGCCCTCGAGATCCAGGAGACGGGAGCCTGGACAAAGT
 GTGTCCTGGGCCACCAGTTCCTGATGCCACCCACTCTGGTTCGGACAGTTTCATTGGCTTCTGAACA
 TCTATGAGCCTGACTATGCCAAAGCTGTGTACAGCCGTGGGGACCCTAAGGCCCTGATGTGTACTT
 CTCTCCAGTGGATTGGGAGAGGCTGCTGGTCTTGGGGGCCAAGTGGTTCAGCACCAGCAAGCTG
 CTCACACCTGGCTTTCATTATGATGTGCTGAAGCCCTATGTGGCCGTGTTCACTGAGTCTACACGTATCA
 TGCTGGACAAGTGGGAAGAGAAAGCTCGGGAGGGTAAGTCCTTTGACATCTTCTGCGATGTGGGTACAT
 GCGCTGAACACACTCATGAAGTGCACCTTTGGAAGAGGAGACACCGCCTGGGCCACAGCAGGGACAGC
 AGCTACTACCTTGCAGTACGATCTCACTCTGTTGATGCAGCAGCGCCTTGTGTCTTCCAGTACCATA
 ATGACTTCATCTACTGGCTCACCCACATGGCCGCGCTTCTGCGGGCCTGCCAGTGGCCATGACCA
 TACAGACCAGGTCATCAGGGAGCGGAAGGCAGCCCTGCAGGATGAGAAGGTGCGGAAGAAGATCCAGAAC
 CGGAGGCACCTGGACTTCTGGACATTCCTGGGTGCCCGGATGAAGATGACATCAAAGTGCAGATG
 CAGACCTCCGGGCTGAAGTGGACACATTCATGTTTGAAGGCCATGACACCACCAGTGGTATCTCCTG
 GTTCTCTACTGCATGGCCCTGTACCCTGAGCACCAGCATCGTTGTAGAGAGGAGTCCGCGAGATCCTA
 GGGGACCAGGACTTCTCCAGTGGGATGATCTGGGCAAAATGACTTATCTGACCATGTGCATCAAGGAGA
 GCTTCGCTCTACCCACCTGTGCCAGGTGTACCGCCAGCTCAGCAAGCCTGTACCTTTGTGGATGG
 CCGGTCTCTACCTGCAGGAAGCCTGATCTCTATGCATATCTATGCCCTCCATAGGAACAGTGTGTATGG
 CCCGACCTGAGGTCTTGGACTCTGCGCTTTTCCACTGAGAATGCATCCAAACGCCATCCCTTTGCC
 TTATGCCCTTCTGCTGGGCCAGGAAGTGCATTGGGCAGCAGTTTGCATGAGTGAGTGAAGGTGGT
 CACAGCCATGTGCTTGTCCGCTTTGAGTCTCTCTGGACCCCTCACGGCTGCCATCAAGATGCCCCAG
 CTTGCTCTGCGCTCAAGAATGGCTTTCACCTCCACTGAAGCCACTGGGCCCTGGGTCTGGGAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204606 protein sequence
 Red=Cloning site Green=Tags(s)

MVPSFSLSFSSGLWASGLILVLGFLKLIHLLLRQTLAKAMDKFPGPPTHWLFHHALEIQETGSLDKV
 VSWAHQFPYAHPLWFGQFIGFLNIYEPDYAKAVYSRGPDPKAPDVYDFLQWIGRLLVLEGPKWQHRKL
 LTPGFHYDVLKPYVAVFTESTRIMLDKWEKAREGKSFDFCDVGHMALNLMKCTFGRGDTGLGHSRDS
 SYYLAVSDLTLLMQRLVSFQYHNDFIYWLTPHGRRFLRACQVAHDHTDQVIRERKAALQDEKVRKKIQN
 RRHLDFLDILLGARDEDDIKLSDADLRAEVDTFMFEGHDTTSGISWFLYCMALYPEHQHRCREEVREIL
 GDQDFQWDDLKMTYLTMCIKESFRLYPPVPQVYRQLSKPVTVDGRSLPAGSLISMHIYALHRNSAVW
 PDPEVFDLRFSTENASKRHPFAFMPFSAGPRNCIGQQFAMSEMKVVTAMCLLRFEFSLDPSRLPIKMPQ
 LVLRSKNGFHLHLKPLPGSGK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6068_f10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_000779

ORF Size: 1536 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.

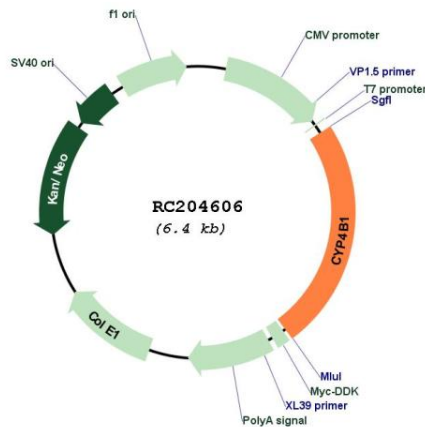
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

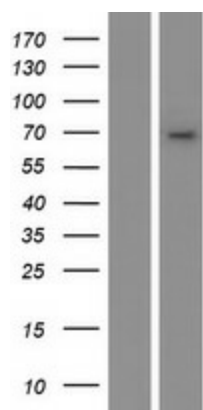
RefSeq: [NM_000779.4](#)
RefSeq Size: 2170 bp
RefSeq ORF: 1536 bp
Locus ID: 1580
UniProt ID: [P13584](#)
Cytogenetics: 1p33
Domains: p450
Protein Families: Druggable Genome, P450, Transmembrane
MW: 59.1 kDa

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. In rodents, the homologous protein has been shown to metabolize certain carcinogens; however, the specific function of the human protein has not been determined. Multiple transcript variants have been found for this gene. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RC204606



Western blot validation of overexpression lysate (Cat# [LY424521]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204606 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).