

## Product datasheet for **RC204074**

### **CYP1B1 (NM\_000104) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CYP1B1 (NM_000104) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYP1B1
Synonyms:	ASGD6; CP1B; CYP1B1; GLC3A; P4501B1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC204074 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGCACCAGCCTCAGCCGAACGACCCTTGGCCGCTAAACCCGCTGTCCATCCAGCAGACCACGCTCC  
 TGCTACTCCTGTGGTGTGTCGACTGTGATGTGGGCCAGCGGCTGCTGAGGCAACGGAGCGGCAGCT  
 CCGGTCCGCGCCCCGGGCCGTTTTCGCTGGCCACTGATCGAAACGCGCGCGGTGGGCCAGGCGGCT  
 CACCTCTCGTTCGCTCGCTGGCGGGCCTACGGCGACGTTTTCCAGATCCGCCTGGCAGCTGCCCA  
 TAGTGGTGTGAATGGCAGCGGCCATCCACCAGGCCCTGGTGCAGCAGGGCTCGGCCCTCGCCGACCG  
 GCCGCCCTTCGCCTCCTTCGCTGTGGTGTCCGGCGGCCGAGCATGGCTTTCGGCCACTACTCGGAGCAC  
 TGAAGGTGCAGCGCGCGCAGCCACAGCATGATGCGCAACTTCTTACGCGCCAGCCGCGCAGCCGCC  
 AAGTCTCGAGGGCCACGTGCTGAGCGAGCGCGCAGCTGGTGGCGCTGCTGGTGGCGCGCAGCGCGGA  
 CGCGCCCTTCCTCGACCCGAGGCCGCTGACCGTGTGGCCGTGGCCAACGTCATGAGTCCGCTGTGTTTC  
 GGTGCCGCTACAGCCACGACGACCCCGAGTTCGCTGAGCTGCTCAGCCACAACGAAGATTCCGGCGCA  
 CGGTGGGCGCGGGCAGCCTGGTGGAGCTGATGCCCTGGCTGCACTTCCCAACCCGGTGGCGACCGT  
 TTTCCGGAATTCGAGCAGCTCAACCGCAACTTCAGCAACTTCATCCTGGACAAGTTCCTGAGGCACTGC  
 GAAAGCCTTCGGCCCGGGGCCGCCCCCGCGACATGATGGACGCCTTATCCTCTCTCGGAAAAGAAGG  
 CGGCCGGGACTCGCACGGTGGTGGCGCGGGCTGGATTTGGAGAACGTACCGGCCACTATCACTGACAT  
 CTTCCGGCCAGCCAGGACACCTGTCCACCGCGCTGCAGTGGCTGCTCCTCCTTCCACAGGTATCCT  
 GATGTGCCAGACTCGAGTGCAGGCAGAATTGGATCAGGTCGTGGGAGGGACCGTGCCTTGTATGGGTG  
 ACCAGCCCAACCTGCCCTATGTCCTGGCCTTCTTTATGAAGCCATGCGCTTCTCCAGCTTGTGCTGT  
 CACTATTCTCATGCCACCACTGCCAACACCTCTGTCTTGGGCTACCACATTCCTCAAGGACACTGTGGTT  
 TTTGTCAACCAAGTGGTCTGTGAATCATGACCCAGTGAAGTGGCCTAACCCGGAGAACTTTGATCCAGCTC  
 GATTCTTGGACAAGGATGGCCTCATCAACAAGGACCTGACCAGCAGAGTATGATTTTTTTCAGTGGGCAA  
 AAGCGGTGCATTGGCGAAGAACTTTCTAAGATGCAGCTTTTTCTCTTCCATCCTCCATCCTGGCTCACCAG  
 TGCGATTTAGGGCCAAACCAATGAGCCTGCGAAAATGAATTTTCAGTTATGGTCAACCATTAACCCA  
 AGTCATTTAAAGTCAATGCTACTCTCAGAGAGTCCATGGAGCTCCTTGATAGTGTGTCCAAAATTTACA  
 AGCCAAGGAAACTTGCCAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC204074 protein sequence  
 Red=Cloning site Green=Tags(s)

MGTSLSPNDPWPLNPLSIQQTLLLLLLSVLATVHVQRLLRQRRRQLRSAPPGPF AWPLIGNAAAVGQAA  
 HLSFARLARRYGDVVFQIRLGSCPVVVNGERAIHQALVQQGSFAFADRPFAFASFRVVSGRSMAGHYSEH  
 WKVQRRAAHSMRNFFTRQPRSRQVLEGHVLSARELVALLVRGSADGAFLDPRPLTVVAVANVMSAVCF  
 GCRYSHDDPEFRELLSHNEEFGRTVGAGSLVDVMPWLQYFNPVPTVFRFEQLNRNFSNFILDKFLRHC  
 ESLRPGAAPRDMDAFILSAEKKAAGDSHGGGARLDLENVPATITDIFGASQDTLSTALQWLLLLFTRYP  
 DVQTRVQAEQVVDVGRDRLPCMGDQPNLPYVLAFLYEAMRFSSFVPVTPHATTANTSVLGYHIPKDTVV  
 FVNQWSVNHDPVKWPNPENFDPARFLDKDGLINKDLTSRVMIFSVGKRRCIGEELSKMQLFLFISILAHQ  
 CDFRANPNPAKMNFSYGLTIKPKSFKVNVTLRESMELLDSAVQNLQAKETCQ

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6199\\_b07.zip](https://cdn.origene.com/chromatograms/mk6199_b07.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_000104

ORF Size: 1629 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](mailto: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\\_000104.2](#), [NP\\_000095.1](#)

**RefSeq Size:** 5160 bp

**RefSeq ORF:** 1632 bp

**Locus ID:** 1545

**UniProt ID:** [Q16678](#)

**Cytogenetics:** 2p22.2

**Domains:** p450

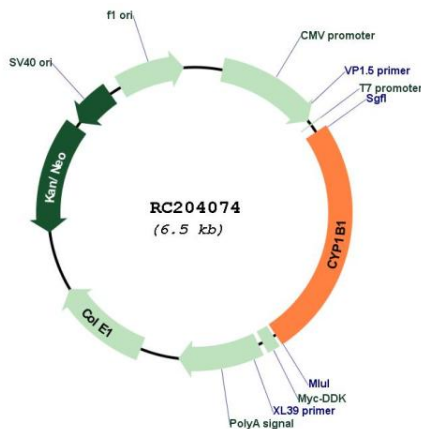
**Protein Families:** Druggable Genome, P450

**Protein Pathways:** Metabolism of xenobiotics by cytochrome P450, Tryptophan metabolism

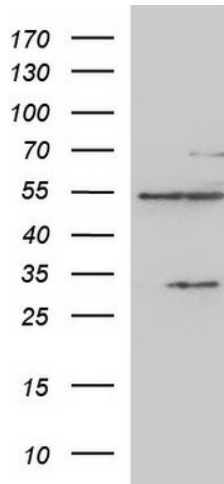
**MW:** 60.8 kDa

**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. The enzyme encoded by this gene localizes to the endoplasmic reticulum and metabolizes procarcinogens such as polycyclic aromatic hydrocarbons and 17beta-estradiol. Mutations in this gene have been associated with primary congenital glaucoma; therefore it is thought that the enzyme also metabolizes a signaling molecule involved in eye development, possibly a steroid. [provided by RefSeq, Jul 2008]

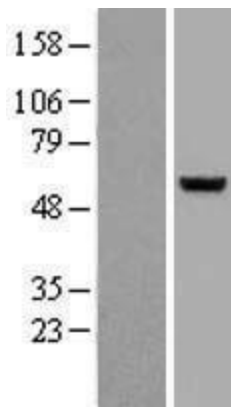
### Product images:



Circular map for RC204074



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CYP1B1 (Cat# RC204074, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CYP1B(Cat# [TA590005]). Positive lysates [LY400032] (100ug) and [LC400032] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400032]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204074 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).