

## Product datasheet for **RG216551**

### **CYP11B1 (NM\_000497) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CYP11B1 (NM_000497) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CYP11B1
Synonyms:	CPN1; CYP11B; FHI; P450C11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG216551 representing NM\_000497  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCACTCAGGGCAAAGGCAGAGGTGTGCATGGCAGTGCCTGGCTGTCCCTGCAAAGGGCACAGGCAC  
 TGGGCACGAGAGCCCGGGTCCCCAGGACAGTGTCCCTTTGAAGCCATGCCCGGGCTCCAGGCAA  
 CAGGTGGCTGAGGCTGCTGCAGATCTGGAGGGAGCAGGGTTATGAGGACCTGCACCTGGAAGTACACCA  
 ACCTTCCAGAACTAGGGCCATTTTCAGGTACGACTTGGGAGGAGCAGGCATGGTGTGTGTGATGCTGC  
 CGGAGGACGTGGAGAAGCTGCAACAGGTGGACAGCCTGCATCCCCACAGGATGAGCCTGGAGCCCTGGGT  
 GGCCTACAGACAACATCGTGGGCACAAATGTGGCGTGTCTTGTCTGAATGGGCCTGAATGGCGCTTCAAC  
 CGATTGCGGCTGAATCCAGAAGTGTGTCGCCAACGCTGTGCAGAGGTTCTCCCGATGGTGGATGCAG  
 TGGCCAGGGACTTCTCCAGGCCCTGAAGAAGAAGGTGTGCAGAACGCCGGGGAGCCTGACCCTGGA  
 CGTCCAGCCCAGCATCTCCACTACACCATAGAAGCCAGCAACTTGGCTCTTTTTGGAGAGCGGCTGGGC  
 CTGGTTGGCCACAGCCCCAGTTCTGCCAGCCTGAACTTCTCCATGCCCTGGAGGTCATGTTCAAAATCCA  
 CCGTCCAGCTCATGTTTATGCCAGGAGCCTGTCTCGCTGGACCAGCCCCAAGGTGTGGAAGGAGCACTT  
 TGAGGCCTGGGACTGCATCTTCCAGTACGGCGACAACGTATCCAGAAAACTATCAGGAACTGGCCTTC  
 AGCCGCCCTCAACAGTACACCAGCATCGTGGCAGAGCTCCTGTTGAATGCCGAACTGTGCCAGATGCCA  
 TCAAGGCCAACTATGGAACCTACTGCAGGGAGCGTGGACACGACGGTGTTCCTTGTGTATGACGCT  
 CTTTGAGCTGGCTCGGAACCCCAACGTGCAGCAGGCCCTGCGCCAGGAGACCTGGCCGCCGAGCCAGC  
 ATCAGTGAACATCCCCAGAAGGCAACCACCGAGCTGCCCTTGTGCGTGGCCCTCAAGGAGACCTTGC  
 GGCTCTACCTGTGGGTCTGTTTCTGGAGCGAGTGGCAGCTCAGACTTGGTGTCTCAGAATACCACAT  
 CCCAGCTGGGACATTGGTGGCGCTGTTCTCTACTCTCTGGGTGCGCAACCCCGCCTTGTTCGCCAGGCCT  
 GAGCGCTATAACCCAGCGCTGGCTAGACATCAGGGGCTCCGGCAGGAACCTTACCACGTGCCCTTGTG  
 GCTTTGGCATGCGCCAGTGCCTTGGGCGGCGCCTGGCAGAGGCAGAGATGCTGCTGCTGCTGCACCATGT  
 GCTGAAACACCTCCAGGTGGAGACATAACCCAAGAGGACATAAAGATGGTCTACAGCTTCAATTGAGG  
 CCCAGCATGTTCCCTCCTCACCTTCCAGCCATCAAC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG216551 representing NM\_000497  
 Red=Cloning site Green=Tags(s)

MALRAKAEVCMVWPWLSLQRAQALGTRARVPRTVLPFEAMPRRPGNRWLRLLQIWIWREQGYEDLHLEVHQ  
 TFQELGPIFRYDLGGAGMVCMLPEDVEKLQQVDSLPHHRMSLEPWVAYRQHRGHKCGVFLNNGPEWRFN  
 RLRLNPEVLSNVAVQRFLPMVDAVARDFSQALKKKVLQNARGSLTLDVQPSIFHYTIEASNLALFGERLG  
 LVGHSPSSASLNFLHALEVMFKSTVQLMFMPRSLSRWTSKPVWKEHFEAWDCIFQYGDNCIQKIYQELAF  
 SRPQQYTSIVAELLLNAELSPDAIKANSMELTAGSVDTTVFPLLMTL FELARNPNVQQALRQESLAAAAS  
 ISEHPQKATTELP LLRAALKETLRLYPVGLFLERVASSDLVLQNYHIPAGTLVVRVFLYSLGRNPALFPRP  
 ERYNPQRWLDIRGSGRNFYHVPF GFGMRQCLGRRLAEAEMLLLLHHV LKHLQVETLTQEDIKMVYSFILR  
 PSMFPLLTFRAIN

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_000497

**ORF Size:** 1509 bp

**OTI Disclaimer:** 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\\_000497.3](#), [NP\\_000488.3](#)

**RefSeq Size:** 3551 bp

**RefSeq ORF:** 1512 bp

**Locus ID:** 1584

**UniProt ID:** [P15538](#)

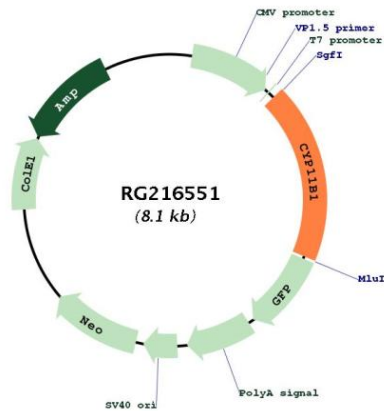
**Cytogenetics:** 8q24.3

**Protein Families:** Druggable Genome, P450

**Protein Pathways:** Androgen and estrogen metabolism, C21-Steroid hormone metabolism, Metabolic pathways

**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 mitochondrial inner membrane and is involved in the conversion of progesterone to cortisol in the adrenal cortex. Mutations in this gene cause congenital adrenal hyperplasia due to 11-beta-hydroxylase deficiency. Transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG216551