

Product datasheet for **RC221240**

CYP11B1 (NM_001026213) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP11B1 (NM_001026213) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYP11B1
Synonyms:	CPN1; CYP11B; FHI; P450C11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC221240 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCACTCAGGGCAAAGGCAGAGGTGTGCATGGCAGTGCCTGGCTGTCCCTGCAAAGGGCACAGGCAC
 TGGGCACGAGAGCGCCCGGGTCCCCAGGACAGTGTGCCCTTTGAAGCCATGCCCGGGCTCCAGGCAA
 CAGGTGGCTGAGGCTGCTGCAGATCTGGAGGGAGCAGGGTTATGAGGACCTGCACCTGGAAGTACACCAG
 ACCTTCCAGAACTGGGGCCATTTTCAGGTACGATTTGGGAGGAGCAGGCATGGTGTGTGTGATGCTGC
 CGGAGGACGTGGAGAAGCTGCAACAGGTGGACAGCCTGCATCCCCACAGGATGAGCCTGGAGCCCTGGGT
 GGCCTACAGACAACATCGTGGGCACAAATGTGGCGTGTCTTGTCTGAATGGGCCTGAATGGCGCTTCAAC
 CGATTGCGGCTGAATCCAGAAGTGTGTCGCCAACGCTGTGCAGAGGTTCTCCCGATGGTGGATGCAG
 TGGCCAGGGACTTCTCCAGGCCCTGAAGAAGAAGGTGTGCAGAACGCCGGGGGAGCCTGACCCTGGA
 CGTCCAGCCCAGCATCTCCACTACACCATAGAAGCCAGCAACTTGGCTCTTTTTGGAGAGCGGCTGGGC
 CTGGTTGGCCACAGCCCCAGTTCTGCCAGCCTGAACTTCTCCATGCCCTGGAGGTCATGTTCAAATCCA
 CCGTCCAGCTCATGTTTCATGCCAGGAGCCTGTCTCGCTGGACCAGCCCCAAGGTGTGGAAGGAGCACTT
 TGAGGCCTGGGACTGCATCTTCCAGTACGGCGACAACGTATCCAGAAAACTATCAGGAACTGGCCTTC
 AGCCGCCCTCAACAGTACACCAGCATCGTGGCGGAGCTCCTGTTGAATGCCGAACTGTGCCAGATGCCA
 TCAAGGCCAACTATGGAACCTACTGCAGGGAGCGTGGACACGACGGTGTTCCTTGTGATGACGCT
 CTTTGAGCTGGCTCGGAACCCCAACGTGCAGCAGGCCCTGCGCCAGGAGACCTGGCCGCCGAGCCAGC
 ATCAGTGAACATCCCCAGAAGGCAACCACCGAGCTGCCCTTGTGCGTGGCGCCCTCAAGGAGACCTTGC
 GGCTCTACCCTGTGGGTCTGTTTCTGGAGCGAGTGGCGAGCTCAGACTTGGTGTTCAGAACTACCACAT
 CCAGCTGGGGTGTGAAACACCTCCAGGTGGAGACACTAACCCAAGAGGACATAAAGATGGTCTACAGC
 TTCATATTGAGGCCAGCATGTTCCCCCTCTCACCTTCAGAGCCATCAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221240 protein sequence
 Red=Cloning site Green=Tags(s)

MALRAKAEVCMAYPWL SLQRAQALGTRAARVPRTVLPFEAMPRRPGNRWLRLLQIWREQYEDLHLEVHQ
 TFQELGPIFRYDLGGAGMVCMLPEDVEKLQQVDSLHPRMSLEPWVAYRQHRGHKCGVFLNNGPEWRFN
 RLRLNPEVLSNVAVQRF LPMVDAVARDF SQALKKKVLQNARGSL TLDVQPSIFHYTIEASNLALFGERLG
 LVGHSPSSASLNFLHALEVFMFKSTVQLMFMPRSLSRWTS PKVWKEHFEAWDCIFQYGDNCIQKIYQELAF
 SRPQQYTSIVAELLLNAELSPDAIKANSMELTAGSVDTTVFPLMTL FELARNPNVQQALRQESLAAAAS
 ISEHPQKATTELPLLRAALKETLRLYPVGLFLERVASSDLVLQNYHIPAGVLKHLQVETLTQEDIKMVYS
 FILRPSMFPLLTFRAIN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6451_d03.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001026213

ORF Size: 1311 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_001026213.1](#), [NP_001021384.1](#)

RefSeq Size: 3353 bp

RefSeq ORF: 1314 bp

Locus ID: 1584

UniProt ID: [P15538](#)

Cytogenetics: 8q24.3

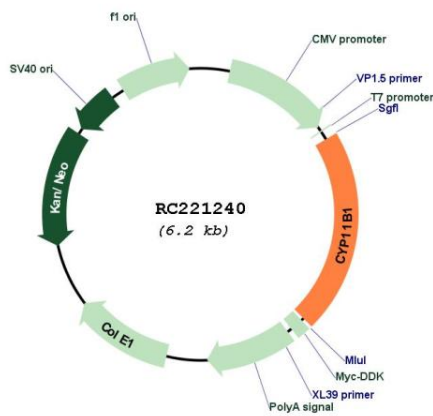
Protein Families: Druggable Genome, P450

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

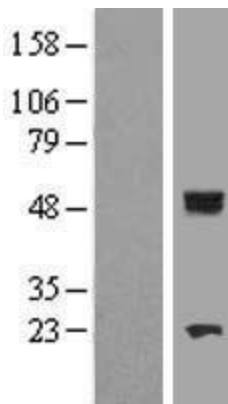
MW: 49.7 kDa

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 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]

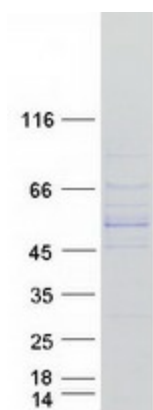
Product images:



Circular map for RC221240



Western blot validation of overexpression lysate (Cat# [LY422463]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221240 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CYP11B1 protein (Cat# [TP321240]). The protein was produced from HEK293T cells transfected with CYP11B1 cDNA clone (Cat# RC221240) using MegaTran 2.0 (Cat# [TT210002]).