

Product datasheet for **SC123879**

CYP11B1 (NM_000497) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP11B1 (NM_000497) Human Untagged Clone
Tag:	Tag Free
Symbol:	CYP11B1
Synonyms:	CPN1; CYP11B; FHI; P450C11
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

>OriGene ORF sequence for NM_000497 edited
 GGGCGCCCGCAATTCGGCACCAGATGGCACTCAGGGCAAAGGCAGAGGTGTGCATGGCA
 GTGCCCTGGCTGTCCCTGCAAAGGGCACAGGCACTGGGCACGAGAGCCGCCCGGGTCCCC
 AGGACAGTGTGCCCTTTGAAGCCATGCCCCGGCGTCCAGGCAACAGGTGGCTGAGGCTG
 CTGCAGATCTGGAGGGAGCAGGGTTATGAGGACCTGCACCTGGAAGTACACCAGACCTTC
 CAGGAAGTAGGGCCATTTTCAGGTACGACTTGGGAGGAGCAGGCATGGTGTGTGTGATG
 CTGCCGGAGGACGTGGAGAAGCTGCAACAGGTGGACAGCCTGCATCCCCACAGGATGAGC
 CTGGAGCCCTGGGTGGCCTACAGACAACATCGTGGGCACAAATGTGGCGTGTCTTGCTG
 AATGGGCCTGAATGGCGCTTCAACCGATTGCGGCTGAATCCAGAAGTGTGTGCGCCAAC
 GCTGTGCAGAGGTTCTCCCGATGGTGGATGCAGTGGCCAGGACTTCTCCAGGCCCTG
 AAGAAGAAGGTGCTGCAGAACGCCCGGGGAGCCTGACCTGGACGTCCAGCCAGCATC
 TTCCACTACACCATAGAAGCCAGCAACTGGCTCTTTTTGGAGAGCGGCTGGGCCTGGTT
 GGGCACAGCCCCAGTTCTGCCAGCCTGAACTTCTCCATGCCCTGGAGGTCATGTTCAA
 TCCACCGTCCAGTCTATGTTTCATGCCAGGAGCCTGTCTCGCTGGACCAGCCCCAAGGTG
 TGAAGGAGCACTTTGAGCCTGGGACTGCATCTTCCAGTACGGGACAACCTGTATCCAG
 AAAATCTATCAGGAAGTGGCCTTCAGCCGCCCTAACAGTACACCAGCATCGTGGCAGAG
 CTCTGTGAATGCGGAAGTGTGCCAGATGCCATCAAGGCCAACTCTATGGAAGTCACT
 GCAGGGAGCGTGGACACGACGGTGTTCCTTGGCTGATGACGCTCTTTGAGCTGGCTCGG
 AACCCCAACGTGCAGCAGGCCCTGCGCCAGGAGCCTGGCCGCCGACAGCCAGCATCAGT
 GAACATCCCCAGAAGGCAACACCGAGCTGCCCTTGTGCGTGGCCCTCAAGGAGACC
 TTGGCGCTTACCTGTGGGTCTGTTTCTGGAGCGAGTGGCGAGCTCAGACTTGGTGCTT
 CAGAATACCACATCCCAGCTGGGACATTGGTGCAGGCTTCTCTACTCTCTGGGTGCG
 AACCCCGCTTGTCCCAGGCCCTGAGCGCTATAACCCCAAGCGCTGGCTAGACATCAGG
 GGCTCCGGCAGGAAGTCTACCAGTGCCTTTGGCTTTGGCATGCGCCAGTGCCTTGGG
 CGGCGCCTGGCAGAGGCAGAGATGCTGCTGCTGCTGCACCATGTGCTGAAACACCTCCAG
 GTGGAGACTAACCAGAGGACATAAAGATGGTCTACAGTTCATATTGAGGCCACG
 ATGTTCCCTCCTCACCTTCAGAGCCATCAACTAATCACGTCTCTGCACCCAGGGTCCC
 AGCCTGGCCACCAGCCTCCCTTCTGCTGACCCAGGCCACCCCTTCTCTCCACAT
 GCACAGCTTCTGAGTACCCCTCTGTCTAACCAGCCCCAGCACAAATGGAAGTCCCGAG
 GGCCTTAGGACCAGGGTTTGGCAGGCTAAGCAGCAATGCCAGGGCACAGCTGGGAAGA
 TCTTGCTGACCTTGTCCCAGCCCCACCTGGCCCTTCTCCAGCAAGCACTGTCTCTGG
 GCAGTTTGCCCCCATCCCTCCCAGTGTGGCTCCAGGCTCCTCGTGTGGCCATGCAAGGG
 TGCTGTGGTTTTGTCCCTTGCCCTCCTGCCTAGTCTCACATGTCC

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000497 unedited
 ACGTCAAATTTGTAACGACTCATATAGGGCGGCCGCAATTCGCACCAGNAGGCACTC
 AGGGCAAAGGCAGAGGTGTGCATGGCAGTGCCTGGCTGTCCCTGCAAAGGGCACAGGCA
 CTGGGCACGAGAGCCGCCGGGTCCCCAGGACAGTGTGCCCTTTGAAGCCATGCCCCGG
 CGTCCAGGCAACAGGTGGCTGAGGCTGCTGCAGATCTGGAGGGAGCAGGGTTATGAGGAC
 CTGCACCTGGAAGTACACCAGACCTTCCAGGAAGTGGGCCATTTTCAGGTACGACTTG
 GGAGGAGCAGGCATGGTGTGTGTGATGCTGCCGGAGGACGTGGAGAAGTGCACAGGTG
 GACAGCCTGCATCCCCACAGGATGAGCCTGGAGCCCTGGGTGGCCTACAGACAACATCGT
 GGGCACAATGTGGCGTGTCTTGTGTAATGGGCCTGAATGGCGCTTCAACCGATTGCGG
 CTGAATCCAGAAGTGTGTGCGCCAACGCTGTGCAGAGGTTCTCCCGATGGTGGATGCA
 GTGGCCAGGGACTTCTCCAGGCCCTGAAGAAGAAGGTGCTGCAGAACGCCCGGNGGAGC
 CTGACCCTGGACGTCCAGCCAGCATCTTCCACTACACCATAGAAGCCAGCAACTTGGCT
 CTTTTTGGAGAGCGGCTGGCCCTGGTTGGCCACAGCCNAGTTCTGCCAGCCTGAACTTC
 CTCCATGCCCTGGAGGTCATGTTCAAATCCACCGTCCAGCTCATGTTTCATGCCAGGAGC
 CTGTCTCGCTNGACCAGCCCCAAGGTGTGGNAAGGAGCACTTTGAGGCCTGGGACTGCAT
 CTTCCAGTACGGGCGACACTGTATCCAGAAAATCTATCAGGAAGTGGCCTTCAGCCGCC
 TCACAGTACACCAGCATCGTGGCAGAGCTCCTGTTG

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_000497 unedited GGAGAGGCACTGGGGAGGGGTACAGGGATGCCACCCGGGATCTGTTTCAGGAAACAGCTA TGACCCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT TTTTTTTTTTTTTTTAGAGAAACAGAAGCCGAGTAGTTAATCTGAATTTTTGGGTCCG CCTCCAGAATTCATAGGCTGAAATCTAGTCACCAAGGGGACGATAATAGCAGGGCAGGGC CTTTGAGGGGGGAAGGAATGCAGGCCGTGCCCTCTTGAATGGAAGTGGCGTCTTATAA AAAAGGCTCTGTGAGCTGCTTGGCCCTTTCCACCATGTGAGGACACAGCAAGAAGGTT TTATCTATGAAACAAGAGGTGGTCCTCACCAGACACAGAACCTGGTGACACCTTGATCT TAGCCTTCTAAGCCTTCAAGAACATGAGAAATAGAATTCTGATGTTTGTGAGCAACCCAG TCTATGGCGTTTTCTTAGAGCATCCTGAATAGATTAACACAAATAACTCTAGCTAGGTGT GCTCCCAACCTGGGGCACTTCATCTCCCTGTACAGGCTGAGTCTGCAGGGCGTCTGGA TCTACTGACCACCACTGGAATGATGCCATAGGGATTTCCCTTTCATGGGGGAACAAATG CTCTGATCCTCATCAGCCACCAGGAGCTGGCTGCTGTGATCTTTGCCCTGATGAAATCC ATGGAGATAAAGACAGTCT
Restriction Sites:	Please inquire
ACCN:	NM_000497
Insert Size:	3600 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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]

Transcript Variant: This variant (1) encodes the longer isoform (1).