

Product datasheet for **SC104446**

Cytochrome P450 2D6 (CYP2D6) (NM_000106) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cytochrome P450 2D6 (CYP2D6) (NM_000106) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cytochrome P450 2D6
Synonyms:	CPD6; CYP2D; CYP2D7AP; CYP2D7BP; CYP2D7P2; CYP2D8P2; CYP2DL1; CYP1ID6; P450-DB1; P450C2D; P450DB1
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_000106 edited
 TCGGCACGAGGCCTGGTCTGTGCTGGTGGGGTGGGGTGCCAGGTGTGCCAGAGG
 AGCCCATTTGGTAGTGAGGCAGGTATGGGGCTAGAAGCACTGGTGGCCCTGGCCGTGATA
 GTGGCCATCTTCTGCTCCTGGTGGACCTGATGCACCGCGCCAACGCTGGGCTGCACGC
 TACTCACCAGGCCCTGCCACTGCCCGGGCTGGGCAACCTGCTGCATGTGGACTCCAG
 AACACACCATACTGCTTCGACCAGTTGCGGCGCCGCTTCGGGGACGTGTTACGCTGCAG
 CTGGCCTGGACGCCGGTGGTCTGCTCAATGGGCTGGCGGCCGTGCGCGAGGCCGTGGTG
 ACCCACGGCGAGGACACCGCCGACCGCCGCTGTGCCATCACCCAGATCCTGGGTTTT
 GGGCCGCTTCCCAAGGGGTGTTCTGGTGGCTATGGGCCCGCTGGCGGAGCAGAGG
 CGCTTCTCCGTCTCCACCTTGGCAACTTGGCCTGGGCAAGAAGTCGCTGGAGCAGTGG
 GTGACCGAGGAGGCCCTGCCTTTGTCCGCTTCGCCAACCCTCCGGACGCCCTTT
 CGCCCCAACGGTCTTTGGACAAAGCCGTGAGCAACGTGATCGCTCCCTCACCTGCGGG
 CGCCGCTTCGAGTACGACGACCCTCGTTCCTCAGGCTGCTGGACCTAGCTCAGGAGGA
 CTGAAGGAGGAGTCGGGCTTTGCGCGAGGTGCTGAATGCTGTCCCGTCTCTGCAT
 ATCCCAGCGCTGGCTGGCAAGGTCTACGCTTCCAAAAGGCTTTCTGACCCAGCTGGAT
 GAGCTGCTAACTGAGCACAGGATGACCTGGGACCCAGCCAGCCCCCGAGACCTGACT
 GAGGCCTTCTGGCAGAGATGGAGAAGGCCAAGGGGAACCCTGAGAGCAGCTTCAATGAT
 GAGAACCTGCGCATAGTGGTGGCTGACCTGTTCTTCCCGGGATGGTGACCACCTCGACC
 ACGCTGGCCTGGGGCCTCCTGCTCATGATCCTACATCCGGATGTGCGAGCGCCGTGCCAA
 CAGGAGATCGACGACGTGATAGGGCAGGTGCGGCGACCAGAGATGGGTGACCAGGCTCAC
 ATGCCCTACACCCTGCCGTGATTCATGAGGTGCAGCGCTTTGGGGACATCGTCCCGTGT
 GGTGTGACCCATATGACATCCCCTGACATCGAAGTACAGGGCTTCCGCATCCCTAAGGGA
 ACGACTCATCACCAACCTGTCACTCGGTGCTGAAGGATGAGGCCGTCTGGGAGAAGCC
 TTCGCTTCCACCCGAACACTTCTGGATGCCAGGGCACTTTGTGAAGCCGGAGGCC
 TTCCTGCCTTTCTCAGCAGGCCCGCTGCATGCCTCGGGAGCCCTGGCCCGCATGGAG
 CTCTTCTCTTCTCACCTCCCTGCTGCAGCACTTCACTTCTCGGTGCCCACTGGACAG
 CCCCAGCCAGCCACCATGGTGTCTTTGCTTTCTGGTACCCCATCCCCCTATGAGCTT
 TGTGCTGTGCCCCGCTAGAATGGGTACCTAGTCCCCAGCCTGCTCCCTAGCCAGAGGCT
 CTAATGTACAA

5' Read Nucleotide Sequence: >OriGene 5' read for NM_000106 unedited
 NNNNNGGGGNNNNNNCCCCNNGGNNCGTTTTCAGATTTGTATACGACTACTATAGGC
 GGCCGCGATTTCGACAGAGGCCTGGTCTCTGTGCCTGGTGGGGTGGGGTGCCAGGTGT
 GTCCAGAGGAGCCCATTTGGTAGTGAGGCAGGTATGGGGCTAGAAGCACTGGTGGCCCTG
 GCCGTGATAGTGCCATCTTCTGCTCCTGGTGGACCTGATGCACCGCGCCAACGCTGG
 GCTGCACGCTACTCACCAGGCCCTGCCACTGCCCGGGCTGGGCAACCTGCTGCATGTG
 GACTTCCAGAACACACATACTGCTTCCAGCAGTTGCGGCGCCGCTTCGGGGACGTGTTT
 AGCCTGCAGCTGGCCTGGACGCCGGTGGTCTGCTCAATGGGCTGGCGGCCGTGCGCGAG
 GCGCTGGTGAACACGGCGAGGACACCGCCGACCGCCGCTGTGCCATCACCCAGATC
 CTGNGTTTTGGCCCGCTTCCCAAGGGGTGTTCTGGTGCCTATGGGCCCGCTGGCGC
 GAGCAGAGGCGCTTCTCCGTCTCCACTTGCGCAACTTGGCCTGGGCAAGAAGTCGCTG
 GAGCAGTGGGTGACCGAGGAGGCCGCTGCCTTTGTGCCCTTTCGCCAACCCTCCGGA
 CGCCCTTTTCGCCCAACGGTCTCTTGGACAAAGCCGTGAGCAACGTGATCGCCTTCTC
 ACCTGCGGGCGCCGCTTCGAGTACGACGACCCTCGCTTCTCAGGCTGCTGGACCTAGCT
 CANGAGGGNACTGAGNGANGAGTCGGGCTTTCTGNCGCGAGGTGCTGAAATGCTGTCCCC
 GTCCTTCTGCATATCCCAGCGCTGGCTGGNNCAGGTCTACGCTTCCAAAGGCTTNTCTG
 ACCCANCTGNATGAGCTGCTACTGAGCCAGGATGACCTGGGN

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_000106 unedited NNTTTTACTCTGNAACCGCGCCGCAATCTAANGATCGATTTTTTTTTTTTTTTTTTTTTT TTTTTTTTTTTTTTTTTTTTGGAACTACCACATTGCTTTATTGGACATTAACCTCTGGC TAAGGAACAAGCTGGGGACTAAGTACCCATTTAACGGGGCACAACACAAAACCTCATAA GGGGATGGGGTACCAAGAAAGCAAAAACCCCTGGGGGCTGGGCCGGGCTGTCCAATG GGCACCAAAAACTTAAATGCTTCACCAGGGAGGGGAAAAAAGAAAACTCCATGCCG GCCAAGGGCTCCCCAAGCATGCACCGGGCCTGCTTAAAAAAGCAAGAAAGCCTCCCGC TTTACAAAATGGCCCTGGGCATTCAAAAAATGTTCCGGGTGAAACCGAAAGGGTTTTTC CAAAAGGGCTTATTCTTTAACACCAAAAAAAGTTGGGGAAGAATGCCTTCCCTTAAGG AAGCGAAACCTGTACTTTGATGTCACGGGATGTCATATGGGTACACCCAAGGGGACC ATGTCCCCAAAACGCTGCACCTCATGAATCACCGAATGGTGTAAAGGCATGTGAACCTGG TCACCCATTTTTGGTCGCCGCACCTGCCCTATTACGTTGTGATCTCCTGTTGGACCCG GGCTTCACATTCCGATGTAAGATCATTAAACAAGAAGCCCCAAGCCAACGTGGGTGGAAGT GGTCAACATTCCGGCAGAGAACAGGTCAACCACCACTATGCCGCAAGGTCTCATCATTGA AACTGCTCTTCAAGGGTCCCTTGGCCTTCTTCATCTCTGCCAGAAAGCCTTAATCAGTC TCCGGGGGGGCTGGGCCTGTGTCCAAGTCATCCTGGCCTCAATTAACACTATTAGCTG GGGTCAGAAAGCCTTTTGAAACCTAAGACCCTGCCAACACGCTGAATCCCCAAGAAAC GA
Restriction Sites:	NotI-NotI
ACCN:	NM_000106
Insert Size:	1494 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_000106.4 , NP_000097.2
RefSeq Size:	1673 bp
RefSeq ORF:	1494 bp
Locus ID:	1565
UniProt ID:	P10635

Cytogenetics:	22q13.2
Domains:	p450
Protein Families:	Druggable Genome, P450, Transmembrane
Protein Pathways:	Drug metabolism - cytochrome P450
Gene Summary:	<p>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 and is known to metabolize as many as 25% of commonly prescribed drugs. Its substrates include antidepressants, antipsychotics, analgesics and antitussives, beta adrenergic blocking agents, antiarrhythmics and antiemetics. The gene is highly polymorphic in the human population; certain alleles result in the poor metabolizer phenotype, characterized by a decreased ability to metabolize the enzyme's substrates. Some individuals with the poor metabolizer phenotype have no functional protein since they carry 2 null alleles whereas in other individuals the gene is absent. This gene can vary in copy number and individuals with the ultrarapid metabolizer phenotype can have 3 or more active copies of the gene. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2014]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (1).</p>