

Product datasheet for **SC123882**

CYP7A1 (NM_000780) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP7A1 (NM_000780) Human Untagged Clone
Tag:	Tag Free
Symbol:	CYP7A1
Synonyms:	CP7A; CYP7; CYPVII
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene ORF sequence for NM_000780 edited
CGGCCGGAATTCGGCACCAGGCTTTGTCAACCAAGCTCAAGTTAATGGATCTGGATACT
ATGTATATAAAAAGCCTAGCTTGAGTCTCTTTTCAGTGGCATCCTTCCCTTTCTAATCAG
AGATTTTCTTCCCTCAGAGATTTTGGCCTAGATTTGCAAAATGATGACCACATCTTTGATT
TGGGGGATTGCTATAGCAGCATGCTGTTGTCTATGGCTTATTCTTGAATTAGGAGAAGG
CAAACGGGTGAACCACCTCTAGAGAATGGATTAATTCCATACCTGGGCTGTGCTCTGCAA
TTTGGTGCCAATCCTCTTGAGTTCCTCAGAGCAAATCAAAGGAAACATGGTCATGTTTTT
ACCTGCAAACATAATGGGAAAATATGTCCATTTTCATCACAATCCCTTGTACATACCATAAG
GTGTTGTGCCACGAAAATATTTTGATTGAAAAAATTTCACTTTGCTACTTCTGCGAAG
GCATTTGGGCACAGAAGCATTGACCCGATGGATGGAAATACCACTGAAAACATAAACGCAC
ACTTTTCATCAAAACCTGCAGGGCCATGCCTTGAATTCCTCACGAAAGCATGATGGAA
AACCTCCAACGTATCATGAGACCTCCAGTCTCCTCTAACTCAAAGACCGCTGCCTGGGTG
ACAGAAGGGATGATTCTTTCTGCTACCGAGTGTGTTTGAAGCTGGGTATTTAACTATC
TTTGGCAGAGATCTTACAAGCGGGACACACAGAAAGCACATATTCTAAACAATCTTGAC
AACTTCAAGCAATTCGACAAAAGTCTTTCCAGCCCTGGTAGCAGGCTCCCATTCACATG
TTCAGGACTGCGCACAATGCCCGGGAGAACTGGCAGAGAGCTTGAGGCACGAGAACCTC
CAAAGAGGGAAAAGCATCTCAGAACTGATCAGCCTGCGCATGTTTCTCAATGACACTTTG
TCCACCTTTGATGATCTGGAGAAGGCCAAGACACACCTCGTGGTCTCTGGGCATCGCAA
GCAAACACCATTCCAGCGACTTTCTGGAGTTTATTTCAAATGATTAGGAACCCAGAAGCA
ATGAAAGCAGCTACTGAAGAAGTAAAAGAACATTAGAGAATGCTGGTCAAAAAGTCAGC
TTGGAAGGCAATCCTATTTGTTTGTGTCAGCAAGCAACTGAATGACCTGCCAGTATTAGAT
AGTATAATCAAGGAATCGCTGAGGCTTTCCAGTGCCTCCCTCAACATCCGGAACAGCTAAG
GAGGATTTCACTTTGCACCTTGAGGACGGTTCTACAACATCCGAAAAGATGACATCATA
GCTCTTTACCCACAGTTAATGCACTTAGATCCAGAAATCTACCCAGACCCTTTGACTTTT
AAATATGATAGGTATCTTGATGAAAACGGGAAGACAAAGACTACCTTCTATTGTAATGGA
CTCAAGTTAAAGTATTACTACATGCCCTTTGGATCGGGAGCTACAATATGCTCTGGAAGA
TTGTTGCTATCCACGAAATCAAGCAATTTTGTGTTCTGATGCTTTCTTATTTTGAATTG
GAGCTTATAGAGGGCCAAGCTAAATGTCCACCTTTGGACCAGTCCCGGGCAGGCTTGGGC
ATTTTGCCGCCATTGAATGATATTGAATTTAAATATAAATCAAGCATTGTGAATACAT
GGCTGGAATAAGAGGACACTAGATGATATTACAGGACTGCAGAACCCCTCACCACACAG
TCCCTTTGGACAATGCATTTAGTGGTGGTAGAAATGATTCACCAGGTCCAATGTTGTTT
ACCAGTGTGCTTGTGAATCTTAACATTTTGGTACAGTTTCCAGATGCTATCACAGAC
TCTGCTAGTAAAAGAAGTCTTAGGAGCACAAATAATTTGTTTTCTTTGTATAAGT
CCATGAATGTTTATATAGCCAGGGATTGAAGTTTATTATTTTCAAAGGAAAACACCTTTA
TTTTATTTTTTTTCAAATGAAGATACACATTACAGCCAGGTGTGGTAGCAGGCACCTGT
AGTCTTAGCTACTCGAGAGGCCA

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_000780 unedited</p> <pre>CCGTCAGATTTGTATACGACTCACTATAGGGCGGCCGGAATTCGCACCAGGCTTTGTCA ACCAAGCTCAAGTTAATGGATCTGGATACTATGTATATAAAAAGCCTAGCTTGAGTCTCT TTTCAGTGGCATCCTTCCCTTTCTAATCAGAGATTTTCTTCTCAGAGATTTTGGCCTAG ATTTGCAAAATGATGACCACATCTTTGATTTGGGGATTGCTATAGCAGCATGCTGTTGT CTATGGCTTATTCTTGAATTAGGAGAAGGCAAACGGGTGAACCACCTCTAGAGAATGGA TTAATTCATACCTGGGCTGTGCTCTGCAATTTGGTGCCAATCCTCTTGAGTTCCTCAGA GCAAAATCAAAGGAAACATGGTCATGTTTTTACCTGCAAACTAATGGGAAAATATGTCCAT TTCATCACAATCCCTTGTCCATACCATAAGGTGTTGTGCCACGGAATAATTTTGATTGG AAAAAATTTCACTTTGCTACTTCTGCGAAGGCATTTGGGCACAGAAGCATTGACCCGATG GATGGAAATACCACTGAAAACATAAACGACACTTTCATCAAAACCTGCAGGGCCATGCC TTGAATTCCTCACGAAAGCATGATGGANAACCTCCAACGTATCATGAGACCTCCAGTC TCCTCTAACTCAAAGACCGCTGCCTGGGTGACAGAAGGGATGATTCTTTCTGCTACCGA GTGATGTTTGAAGCTGGGTATTTAACTATCTTTGGGCAGAGATCTTACAAGGCGGGACAC ACAAGAAGCACATATTCTAAACAATCTTGACAACCTTTCAGCAATTCGACAAAGTCTTTCA GCCTGGTAGCACGCCTCCCATTTCCCTGTTCCAGGACTGCGCACAAATGCCCGGGAAGAA CTTGCAGAGAGCTTGAGGCCCAAGACCN</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_000780 unedited</p> <pre>GGAGAGGCACTGGGGAGGGTCCACAGGGATGCCACCCGGGATCTGTTCCAGGAAACAGCTA TGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT TTTTTTTAGATTCATACTTTTATTTCTGAAAGATGAATCATTTCAAATTAATCAAAATGTT AGAATATTTTCTAATATTTGTAATAAAGCAAAAAGGTAATATAATTTAAATATAAAT CCTACCCAGAAATATCAATTGACATAGAGCTGATAACTCATACTTAAATATTTTATCAA AGCATTGTTGTACACAGCATTTAAACACTCGAGTCACCTTAGTTTTTTTTCATCTGCAAGT CATTTAGCGATAAAAAGCATTTAAATAAAACATAATGTCAAGCTGCACCTAATACACTCC ACATGTTTCATAACCAAAGCTTCCAAATGGCTATTTCCATCCAGTTTTAACTTTAAACA TATCACATAAAAAGCTACATTTTTTTCAGTGATAATGTGATTTTAAACATGACAGAAAACT ACTTTTTTTAACTCTGAGAAAACTCTTCTCATTAAATGTGAATGAAATAAAAATATAGAG AAGATAGTTAAAGCCGGACATAGAGTTTTTCAGCACAATAAGTTAAACATGAAGGGAAAA TAAACCACCTTAGTGTTTTTGGAAATCAAGATATCATGTTTAAAGCCCTGATTTTTGATA TAGAGAAGTGAAAA</pre>
Restriction Sites:	Please inquire
ACCN:	NM_000780
Insert Size:	3000 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_000780.2 , NP_000771.1
RefSeq Size:	2877 bp
RefSeq ORF:	1515 bp
Locus ID:	1581
UniProt ID:	P22680
Cytogenetics:	8q12.1
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, P450, Transmembrane
Protein Pathways:	Metabolic pathways, PPAR signaling pathway, Primary bile acid biosynthesis
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 endoplasmic reticulum membrane protein catalyzes the first reaction in the cholesterol catabolic pathway in the liver, which converts cholesterol to bile acids. This reaction is the rate limiting step and the major site of regulation of bile acid synthesis, which is the primary mechanism for the removal of cholesterol from the body. Polymorphisms in the promoter of this gene are associated with defects in bile acid synthesis. [provided by RefSeq, Feb 2010]</p>