

Product datasheet for **SC327516**

CYP51A1 (NM_001146152) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP51A1 (NM_001146152) Human Untagged Clone
Tag:	Tag Free
Symbol:	CYP51A1
Synonyms:	CP51; CYP51; CYPL1; LDM; P450-14DM; P450L1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001146152, the custom clone sequence may differ by one or more nucleotides ATGGTAGGCAAGACATTTACTTACCTTCTGGGGAGTGATGCTGCTGCACTGCTTTTTAAT AGTAAAAATGAAGACCTGAATGCAGAAGATGTCTACAGTCGCCTGACAACACCTGTGTTT GGGAAGGGAGTTGCATACGATGTGCCTAATCCAGTTTTCTGGAGCAGAAGAAAAATGTTA AAAAGTGGCCTTAACATAGCCACTTTAAACAGCATGTTTCTATAATTGAAAAAGAAACA AAGGAATACTTTGAGAGTTGGGGAGAAAGTGGAGAAAAAATGTGTTTGAAGCTCTTTCT GAGCTCATAATTTAACAGCTAGCCATTGTTTGCATGGAAAGGAAATCAGAAGTCAACTC AATGAAAAGGTAGCACAGCTGTATGCAGATTTGGATGGAGTTTCAGCCATGCAGCCTGG CTCTTACCAGTTGGCTGCCTTTGCCTAGTTTCAGACGCAGGGACAGAGCTCATCGGGAA ATCAAGGATATTTTCTATAAAGGCAATCCAGAAACGCAGACAGTCTCAAGAAAAAATGAT GACATTCTCCAACTTTACTAGATGCTACATACAAGGATGGGCGTCTTTGACTGATGAT GAAGTAGCAGGGATGCTTATTGGATTACTCTTGGCAGGGCAGCATACATCCTCAACTACT AGTGCTTGGATGGGCTTCTTTTTGGCCAGAGACAAAACACTTCAAAAAAATGTTATTTA GAACAGAAAAACAGTCTGTGGAGAGAATCTGCCTCCTTTAACTTATGACCAGCTCAAGGAT CTAAATTTACTTGTGCTGTATAAAAGAAACATTAAGACTTAGACCTCCTATAATGATC ATGATGAGAATGGCCAGAACTCCTCAGACTGTGGCAGGGTATACCATTCTCCAGGACAT CAGGTGTGTGTTCTCCCACTGTCAATCAAAGACTTAAAGACTCATGGGTAGAACGCCTG GACTTTAATCCTGATCGCTACTTACAGGATAACCCAGCATCAGGGGAAAAGTTTGCCTAT GTGCCATTTGGAGCTGGGCGTCATCGTTGTATTGGGAAAAATTTGCCTATGTTCAAATT AAGACAATTTGGTCCACTATGCTTCGTTTATATGAATTTGATCTCATTGATGGATACTTT CCCACTGTGAATTATACTATGATTCACACCCTGAAAACCCAGTTATCCGTTACAAA CGAAGATCAAAA
Restriction Sites:	Please inquire
ACCN:	NM_001146152



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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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<u>NM_001146152.1</u> , <u>NP_001139624.1</u>
RefSeq Size:	2934 bp
RefSeq ORF:	1215 bp
Locus ID:	1595
UniProt ID:	<u>Q16850</u>
Cytogenetics:	7q21.2
Protein Families:	Druggable Genome, P450, Transmembrane
Protein Pathways:	Metabolic pathways, Steroid 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 protein participates in the synthesis of cholesterol by catalyzing the removal of the 14alpha-methyl group from lanosterol. Homologous genes are found in all three eukaryotic phyla, fungi, plants, and animals, suggesting that this is one of the oldest cytochrome P450 genes. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and coding sequence compared to variant 1. The resulting isoform (2) is shorter at the N-terminus compared to isoform 1.</p> <p>Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>