

Product datasheet for **SC313894**

UGT (UGT1A1) (NM_000463) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UGT (UGT1A1) (NM_000463) Human Untagged Clone
Tag:	Tag Free
Symbol:	UGT
Synonyms:	BILIQTL1; GNT1; HUG-BR1; UDPGT; UDPGT 1-1; UGT1; UGT1A
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_000463 edited
 ATGGCTGTGGAGTCCCAGGGCGGACGCCCACTTGTCTGGGCTGCTGCTGTGTGTGCTG
 GGCCAGTGGTGTCCCATGCTGGGAAGATACTGTTGATCCCAGTGGATGGCAGCCACTGG
 CTGAGCATGCTTTGGGCCATCCAGCAGCTGCAGCAGAGGGGACATGAAATAGTTGTCCTA
 GCACCTGACGCCCTCGTTGTACATCAGAGACGGAGCATTTTACACCTTGAAGACGTACCCT
 GTGCCATTCCAAAGGGAGGATGTGAAAGAGTCTTTTGTAGTCTCGGGCATAATGTTTTT
 GAGAATGATTCTTCTGCAGCGTGTGATCAAAACATACAAGAAAATAAAAAAGGACTCT
 GCTATGCTTTTGTCTGGCTGTTCCCACTTACTGCACAACAAGGAGCTCATGGCCTCCCTG
 GCAGAAAGCAGCTTTGATGTCATGCTGACGGACCCCTTTCCTTCTGCAGCCCCATCGTG
 GCCCAGTACCTGTCTCTGCCCACTGTATTCTTCTTGCATGCACTGCCATGCAGCCTGGAA
 TTTGAGGCTACCCAGTGGCCCAACCCATTCTCCTACGTGCCAGGCTCTCTCTCTCAT
 TCAGATCACATGACCTTCTGCAGCGGTGAAGAACATGCTCATTGCCTTTTACAGAAC
 TTTCTGTGCGACGTGTTTATCCCGTATGCAACCTTGCCTCAGAATTCCTTCAGAGA
 GAGGTGACTGTCCAGGACCTATTGAGCTCTGCATCTGTCTGGCTGTTTAGAAGTGACTTT
 GTGAAGGATTACCCTAGGCCCATCATGCCAATATGGTTTTTGTGGTGGATCAACTGC
 CTTACCAAAAATCCACTATCCCAGGAATTTGAAGCCTACATTAATGCTTCTGGAGAACAT
 GGAATTGTGGTTTTCTTTGGGATCAATGGTCTCAGAAATCCAGAGAAGAAAGCTATG
 GCAATTGCTGATGCTTTGGGCAAATCCCTCAGACAGTCTGTGGCGGTACACTGGAACC
 CGACCATCGAATCTTGCGAACAACACGATACTTGTAAAGTGGCTACCCAAAACGATCTG
 CTTGGTCACCCGATGACCCGTGCCTTTATCACCCATGCTGGTTCCCATGGTGTATGAA
 AGCATATGCAATGGCGTTCCCATGGTGTGATGCCCTGTTTGGTGTGATCAGATGGACAAT
 GCAAAGCGCATGGAGACTAAGGGAGCTGGAGTGACCCTGAATGTTCTGAAATGACTTCT
 GAAGATTTAGAAAATGCTCTAAAAGCAGTCATCAATGACAAAAGTTACAAGGAGAATC
 ATGCGCCTCTCCAGCCTTACAAGGACCGCCCGGTGGAGCCGCTGGACCTGGCCGTGTTT
 TGGGTGGAGTTTGTGATGAGGCAAGGGCGCGCCACACCTGCGCCCGCAGCCACGAC
 CTCACCTGGTACCAGTACCATTCTTGGACGTGATTGGTTTCTCTTGGCCGTGCTGCTG
 ACAGTGGCCTTATCACCTTTAAATGTTGTGCTTATGGCTACCGGAAATGCTTGGGGAAA
 AAAGGGCGAGTTAAGAAAGCCCAAAATCCAAGACCCATTGA

5' Read Nucleotide Sequence: >OriGene 5' read for NM_000463 unedited
 TACCCCGCCCGTTGNAGCAAAGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAG
 AGCTCGTTTAGTGAACCGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAAT
 TCGGCACGAGGCGCCATGGCTGTGGAGTCCCAGGGCGGACGCCCACTTGTCTGGGCTG
 CTGCTGTGTGTGCTGGGCCAGTGGTGTCCCATGCTGGGAAGATACTGTTGATCCAGTG
 GATGGCAGCCACTGGCTGAGCATGCTTTGGGCCATCCAGCAGCTGCAGCAGAGGGGACAT
 GAAATAGTTGCTTAGCACCTGACGCCTCGTTGTACATCAGAGACGGAGCATTTTACACC
 TTGAAGACGTACCCTGTGCCATTCCAAAGGGAGGATGTGAAAGAGTCTTTTGTAGTCTC
 GGGCATAATGTTTTGAGAATGATTCTTCTGCAGCGTGTGATCAAAACATACAAGAAA
 ATAAAANAGGACTCTGCTATGCTTTTGTCTGGCTGTTCCCACTTACTGCACAACAAGGAG
 CTCATGGCCTCCCTGGCAGAAAGCAGCTTTGATGTCATGCTGACGGACCCCTTNNCTTCT
 TGCAGCCCCATCGTGGCCAGTACCTGTCTGCCCCACTGTATTCTTCTTGCATGCACTG
 CCATGCAGCCTGGAAATTTGAGGCTACCNNAGTGCCCAACCCATTTCTCTACGTGCCCCAG
 CCTCTCNTCTCATTAGATCACATGACCTTNNCTGCAGCGGTGAAGAACATGCTCAT
 TGCCTTTTTACAGAATTTCTGTGCGACGTGTTTATCCCGTATGCAACCTGGCTC
 AGAATTCCTCAAAGAAGGTGACTGTCCAGGACCTATTGAGCTTTCATCTGTCTGGCTT
 GTTAAGAATTGACTTGGGAAGGATTACCCTAGCCCATCATGCCAATTTGTTTTGGC

Restriction Sites: Please inquire

ACCN: NM_000463

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_000463.2</u> , <u>NP_000454.1</u>
RefSeq Size:	2357 bp
RefSeq ORF:	1602 bp
Locus ID:	54658
UniProt ID:	<u>P22309</u>
Cytogenetics:	2q37.1
Domains:	UDPGT
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Androgen and estrogen metabolism, Ascorbate and aldarate metabolism, Drug metabolism - cytochrome P450, Drug metabolism - other enzymes, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Pentose and glucuronate interconversions, Porphyrin and chlorophyll metabolism, Retinol metabolism, Starch and sucrose metabolism

Gene Summary:

This gene encodes a UDP-glucuronosyltransferase, an enzyme of the glucuronidation pathway that transforms small lipophilic molecules, such as steroids, bilirubin, hormones, and drugs, into water-soluble, excretable metabolites. This gene is part of a complex locus that encodes several UDP-glucuronosyltransferases. The locus includes thirteen unique alternate first exons followed by four common exons. Four of the alternate first exons are considered pseudogenes. Each of the remaining nine 5' exons may be spliced to the four common exons, resulting in nine proteins with different N-termini and identical C-termini. Each first exon encodes the substrate binding site, and is regulated by its own promoter. The preferred substrate of this enzyme is bilirubin, although it also has moderate activity with simple phenols, flavones, and C18 steroids. Mutations in this gene result in Crigler-Najjar syndromes types I and II and in Gilbert syndrome. [provided by RefSeq, Jul 2008]