

## Product datasheet for **RC204745**

### UGT (UGT2B4) (NM\_021139) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	UGT (UGT2B4) (NM_021139) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UGT
Synonyms:	HLUG25; UDPGT2B4; UDPGTh-1; UDPGTH1; UGT2B11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC204745 representing NM\_021139  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCTATGAAATGGACTTCAGCTCTTCTGCTGATACAGCTGAGCTGTTACTTTAGCTCTGGGAGTTGTG  
 GAAAGGTGCTGGTGTGGCCACAGAATTCAGCCACTGGATGAATATAAAGACAATCCTGGATGAACTTGT  
 CCAGAGAGGTCATGAGGTGACTGTATTGCATCTTCAGCTTCCATTTCTTTCGATCCCAACAGCCCATCT  
 ACTCTTAAATTTGAAGTTTATCCTGTATCTTAACTAAAAGTGGATTTGAGGATATTATCAAGCAGCTGG  
 TTAAGAGATGGGCAGAATTCAAAAGACATTTTGGTCATATTTTCAAGTACAAGAAATCATGTG  
 GACATTTAATGACATACTAGAAAGTCTGTAAGGATATAGTTTCAAATAAGAAACTTATGAAGAACTA  
 CAGGAGTCAAGATTTGATGTTGTTCTTGCAGATGCTGTTTTCCCTTTGGTGAGCTGCTGGCCGAGTTAC  
 TAAAAATACCCTTTGTCTACAGCCTCCGCTTCTCTCTGGCTACGCAATTGAAAAGCATAGTGGAGGACT  
 TCTGTTCCCTCCTCCTATGTGCTGTTGTTATGTCAGAACTAAGTGACCAAATGACTTTTATAGAGAGG  
 GTAAAAATATGATCTATGTGCTTATTTTGAATTTTGGTTCCAAATATTTGACATGAAGAAGTGGGATC  
 AGTTCTACAGTGAAGTTCTAGGAAGACCCACTACGTTATCTGAGACAATGGCAAAAGCTGACATATGGCT  
 TATTCGAAACTACTGGGATTTTCAATTTCTCACCCACTCTTACCAAATGTTGAGTTCGTTGGAGGACTC  
 CACTGCAAACCTGCCAAACCCCTACCGAAGGAAATGGAAGAGTTTGTCCAGAGCTCTGGAGAAAAATGGTG  
 TTGTGGTGTCTCTGCGGTCGATGGTCAGTAACACGTCAGAAGAAAGGGCCAATGTAATTGCATCAGC  
 CCTTGCCAAGATCCACAAAAGGTTCTGTGGAGATTTGATGGGAATAACCAGATACTTTAGGACTCAAT  
 ACTCGGCTGTACAAGTGGATACCCAGAATGATCTTCTTGGTCACCCAAAACCAGAGCTTTTATAACTC  
 ATGGTGGAGCCAATGGCATCTATGAGGCAATCTACCATGGAATCCCTATGGTGGCGGTTCCATTGTTTGC  
 AGATCAACCTGATAACATTGCACACATGAAGGCCAAGGGAGCAGCTGTTAGTTTGGACTTCCACACAATG  
 TCGAGTACAGACTTACTCAATGCACTGAAGACAGTAATTAATGATCCTTTATATAAAGAGAAATGCTATGA  
 AATTATCAAGAATTCATCATGATCAACCAGTGAAGCCCCTTATCGAGCAGTCTTCTGGATTGAATTTGT  
 CATGCGCCATAAAGGAGCCAAGCACCTTCGGGTTGCAGCCACGACCTCACCTGGTTCCAGTACCACTCT  
 TTGGATGTGACTGGGTTCTGCTGGCCTGTGTGGCACTGTGATATTCATCATCACAAAATGTCTGTTTT  
 GTGCTGGAAGTTTGTAGAACAGGAAAGAAGGGGAAAAGAGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC204745 representing NM\_021139  
 Red=Cloning site Green=Tags(s)

MSMKWTSALLLIQLSCYFSSGSCGKVLVWPTEFSHWMNIKTILDELVQRGHEVTVLASSASISFDPNPS  
 TLKFEVYPVSLTKTEFEDIKQLVWRWELPKDTFWSYFSQVQEI MWTFNDILRKFKDIVSNKKLMKKL  
 QESRFDVVLADAVFPFGELLAELLKIPFVYSLRSPGYAIEKHSGLLFPSPYVPMSELSDQMTFIER  
 VKNMIYVLYFEFQIFDMKKWDQFYSEVLGRPTTSETMAKADIWLIRNYWDFQFPHLLPNVEFVGG  
 HCKPAKPLPKEMEEFVQSSGENGVVVFSLGSMVSNTSEERANVIASALAKIPQKVLWRFDGNKPDTLGLN  
 TRLYKWIQNDLLGHPKTRAFITHGGANGIYEAIYHGIPMVGVPFLFADQPDNIAHMKAKGAAVSLDFHTM  
 SSTDLLNALKTVINDPLYKENAMKLSRIHHDQPVKPLDRAVFWIEFVMRHKGAKHLRVAAHDLTWFQYHS  
 LDVTGFLACVATVIFIIITKCLFCVWKFVRTGKKGKRD

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_021139

**ORF Size:** 1584 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

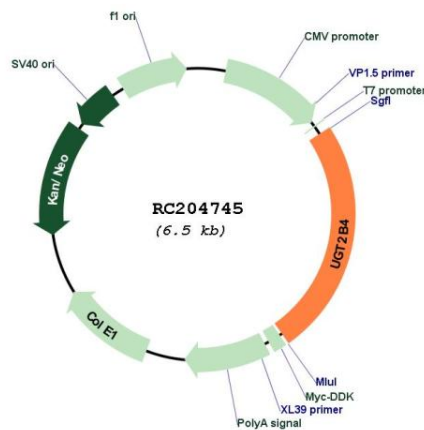
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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:**
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:	<a href="#">NM_021139.3</a>
RefSeq Size:	2119 bp
RefSeq ORF:	1587 bp
Locus ID:	7363
UniProt ID:	<a href="#">P06133</a>
Cytogenetics:	4q13.3
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
MW:	60.5 kDa
Gene Summary:	UDPGTs are of major importance in the conjugation and subsequent elimination of potentially toxic xenobiotics and endogenous compounds. This isozyme is active on polyhydroxylated estrogens (such as estriol, 4-hydroxyestrone and 2-hydroxyestriol) and xenobiotics (such as 4-methylumbelliferone, 1-naphthol, 4-nitrophenol, 2-aminophenol, 4-hydroxybiphenyl and menthol). It is capable of 6 alpha-hydroxyglucuronidation of hydrodeoxycholic acid.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for RC204745