

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)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCTATGAAATGGACTTCAGCTCTTCTGCTGATACAGCTGAGCTGTTACTTTAGCTCTGGGAGTTGTG
 GAAAGGTGCTGGTGTGGCCACAGAATTCAGCCACTGGATGAATATAAAGACAATCCTGGATGAACTTGT
 CCAGAGAGGTCATGAGGTGACTGTATTGCATCTTCAGCTTCCATTTCTTTCGATCCCAACGCCATCT
 ACTCTTAAATTTGAAGTTTATCCTGTATCTTAACTAAAAGTGGATTTGAGGATATTATCAAGCAGCTGG
 TTAAGAGATGGGCAGAACTTCCAAAAGACATTTTGGTCATATTTTCCAAAGTACAAGAAATCATGTG
 GACATTTAATGACATACTTAGAAAGTCTGTAAGGATATAGTTTCAAATAAGAAACTTATGAAGAACTA
 CAGGAGTCAAGATTTGATGTTGTTCTTGCAGATGCTGTTTCCCTTTGGTGAGCTGCTGGCCGAGTTAC
 TAAAAATACCCTTTGTCTACAGCCTCCGCTTCTCTCTGGCTACGCAATTGAAAAGCATAGTGGAGGACT
 TCTGTTCCCTCCTCCTATGTGCCTGTTGTTATGTCAGAACTAAGTGACCAAATGACTTTTATAGAGAGG
 GTAAAAATATGATCTATGTGCTTATTTTGAATTTTGGTTCCAAATATTTGACATGAAGAAGTGGGATC
 AGTTCTACAGTGAAGTTCTAGGAAGACCCACTACGTTATCTGAGACAATGGCAAAAGCTGACATATGGCT
 TATTCGAAACTACTGGGATTTTCAATTTCTCACCCACTCTTACCAAATGTTGAGTTCGTTGGAGGACTC
 CACTGCAAACCTGCCAAACCCCTACCGAAGGAAATGGAAGAGTTTGTCCAGAGCTCTGGAGAAAAATGGTG
 TTGTGGTGTCTCTGCGGTCGATGGTCAGTAACACGTCAGAAGAAAGGGCCAATGTAATTGCATCAGC
 CCTTGCCAAGATCCACAAAAGGTTCTGTGGAGATTTGATGGGAATAACCAGATACTTTAGGACTCAAT
 ACTCGGCTGTACAAGTGGATACCCAGAATGATCTTCTTGGTCACCCAAAACCAGAGCTTTTATAACTC
 ATGGTGGAGCCAATGGCATCTATGAGGCAATCTACCATGGAATCCCTATGGTGGGCGTTCATTTGTTGC
 AGATCAACCTGATAACATTGCACACATGAAGGCCAAGGGAGCAGCTGTTAGTTTGGACTTCCACACAATG
 TCGAGTACAGACTTACTCAATGCACTGAAGACAGTAATTAATGATCCTTTATATAAAGAGAAATGCTATGA
 AATTATCAAGAATTCATCATGATCAACCAGTGAAGCCCCTTATCGAGCAGTCTTCTGGATTGAATTTGT
 CATGCGCCATAAAGGAGCCAAGCACCTTCGGGTTGCAGCCACGACCTCACCTGGTTCCAGTACCACTCT
 TTGGATGTGACTGGTTCCTGCTGGCCTGTGTGGCACTGTGATATTCATCATCACAAAATGTCTGTTTT
 GTGCTGGAAGTTTGTAGAACAGGAAAGAAGGGGAAAAGAGAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204745 representing NM_021139
 Red=Cloning site Green=Tags(s)

MSMKWTSALLLIQLSCYFSSGSCGKVLVWPTEFSHWMNIKTILDELVQRGHEVTVLASSASISFDPNPS
 TLKFEVYPVSLTKTEFEDIKQLVWRWELPKDTFWSYFSQVQEI MWTFNDILRKFKDIVSNKKLMKKL
 QESRFDVVLADAVFPFGELLAELLKIPFVYSLRSPGYAIEKHSGLLFPPSYVPVVMSELSDQMTFIER
 VKNMIYVLYFEFWQIFDMKKWDQFYSEVLGRPTTSETMAKADIWLIRNYWDFQFPHLLPNVEFVGG
 HCKPAKPLPKEMEEFVQSSGENGVVVFSLGSMVSNTSEERANVIASALAKIPQKVLWRFDGNKPDTLGLN
 TRLYKWIQNDLLGHPKTRAFITHGGANGIYEAIYHGIPMVGVPFLFADQPDNIAHMKAKGAAVSLDFHTM
 SSTDLLNALKTVINDPLYKENAMKLSRIHHDQPVKPLDRAVFWIEFVMRHKGAKHLRVA AHDLTWFQYHS
 LDVTGFLACVATVIFIIITKCLFCVWKFVRTGKKGKRD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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 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](#)

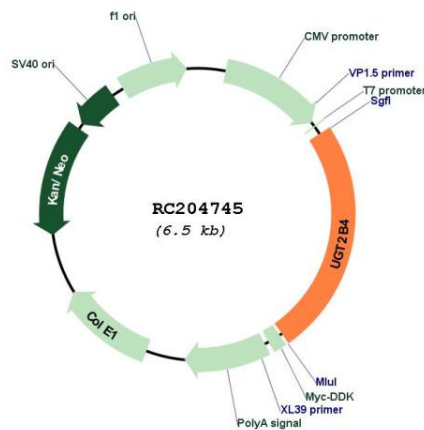
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_021139.3</u>
RefSeq Size:	2119 bp
RefSeq ORF:	1587 bp
Locus ID:	7363
UniProt ID:	<u>P06133</u>
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 hodeoxycholic acid.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC204745