

## Product datasheet for **RC202144**

### **UGT1A10 (NM\_019075) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	UGT1A10 (NM_019075) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UGT1A10
Synonyms:	GNT1; hUG-BR1; UDPGT; UGT-1A; UGT-1J; UGT1; UGT1-01; UGT1-10; UGT1.1; UGT1.10; UGT1A; UGT1A1; UGT1J
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC202144 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTCGCGCAGGGTGGACCAGCCCCGTTCTTTATGTGTGTCTACTGCTGACCTGTGGCTTTGCCG  
 AGGCAGGGAAGCTGCTGGTAGTGCCCATGGATGGGAGTCACTGGTTCACCATGCAGTCGGTGGTGGAGAA  
 ACTTATCCTCAGGGGCATGAGGTGTTGTAGTCATGCCAGAGGTGAGTTGGCAACTGGAAAGATCACTG  
 AATTGCACAGTGAAGACTTACTCAACCTCGTACACTCTGGAAGATCAGAACCAGGAAATTCATGGTTTTCG  
 CCCATGCTCAATGGAAAGCACAGGCACAAAGTATATTTTCTCTATTAATGAGTTCATCCAGTGGTTTTCT  
 TGACTTATTTTTTTCGATTGCAGGAGTTGTTAATGACCGAAAATTAGTAGAATACTTAAAGGAGAGT  
 TCTTTTGTATGCAGTGTCTGGATCCTTTTGATACCTGTGGCTTAATTGTTGCTAAATATTTCTCCCTCC  
 CCTCTGTGGTCTTACCAGGGGAATATTTGCCACCATCTGAAGAAGGTGCACAGTGCCTGCTCTCT  
 TTCCTATGTCCTCAATGATCTCTTAGGGTCTCAGATGCCATGACTTTCAAGGAGAGAGTATGGAACCAC  
 ATCGTGCACTTGGAGGACCAATTTATTTGCCAGTATCTTTTTAGAAATGCCCTAGAAATAGCCTCTGAAA  
 TTCTCAAACCCCTGTCACGGCATATGATCTCTACAGTCACACATCAATTTGGTGTGGCAACGGACTT  
 TGTTTTGGACTATCCAAACCCGTGATGCCCAACATGATCTTCATTGGTGGTATCAACTGTCATCAGGGA  
 AAGCCATTGCCTATGGAATTTGAAGCCTACATTAATGCTTCTGGAGAACATGGAATTGTGGTTTTCTCTT  
 TGGGATCAATGGTCTCAGAAATTCAGAGAAGAAAGCTATGGCAATTGCTGATGCTTTGGGCAAAATCCC  
 TCAGACAGTCTGTGGCGGTACACTGGAACCCGACCATCGAATCTTGGCAACAACACGATACTTGTAAAG  
 TGGTACCCCAAAACGATCTGCTTGGTCACCCGATGACCCGTGCCTTTATCACCATGCTGGTCCCATG  
 GTGTTTATGAAAGCATATGCAATGGCGTCCCATGGTGATGATGCCCTTGTGGTGGATCAGATGGACAA  
 TGCAAAGCGCATGGAGACTAAGGGAGCTGGAGTGACCCTGAATGTTCTGGAAATGACTTCTGAAGATTTA  
 GAAATGCTCTAAAAGCAGTCATCAATGACAAAAGTTACAAGGAGAACATCATGCGCCTCTCCAGCCTTC  
 ACAAGGACCGCCCGTGGAGCCGCTGGACCTGGCCGTGTTCTGGGTGGAGTTTGTGATGAGGCACAAGGG  
 CGCGCCACACCTGCGCCCGCAGCCACGACCTCACCTGGTACCAGTACCATTCTTGGACGTGATTGGT  
 TTCCTCTGGCCGTGCTGCTGACAGTGGCCTTCATCACCTTTAAATGTTGTGCTTATGGCTACCGGAAAT  
 GCTTGGGAAAAAAGGGCGAGTTAAGAAAGCCCAAAATCAAGACCCAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC202144 protein sequence  
 Red=Cloning site Green=Tags(s)

MARAGWTSVPVLCVLLLTTCGFAEAGKLLVVPMDGSHWFTMQSVVEKILIRGHEVVVMPEVSWQLERSL  
 NCTVKTYSTSYTLEDQREFMVFHAHQWKAQAQSFLLMSSSSGFLDLFFSHCRSLFNDRKLVYELKES  
 SFDAVFLDPFDTCGLIVAKYFSLPSVVFTRGIFCHHLEEGAQCPAPLSYVPNDLLGFSAMTFKERVVNH  
 IVHLEDHLFCQYLFRNALEIASEILQTPVTAYDLYSHTSIWLLRTDFVLDYPKPVMNMIFIGGINCHQG  
 KPLPMEFEAYINASGEHGIVVFSLSMVSEIPEKKAMAIADALGIPQTVLWRYTGTRPSNLANNTILVK  
 WLPQNDLLGHPMTRAFITHAGSHGVYESICNGVPMVMPLFGDQMDNAKRMETKGAGVTLNVLEMTSEDL  
 ENALKAVINDKSYKENIMRLSSLHKDRPVEPLDLAVFWVEFVMRHKGAPHLRPAAHDLTWYQYHSLDVIQ  
 FLLAVVLTVAFITFKCCAYGRKCLGKKGRVKKAHKSKTH

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6707\\_d11.zip](https://cdn.origene.com/chromatograms/mk6707_d11.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_019075

**ORF Size:** 1590 bp

**OTI Disclaimer:** 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:** [NM\\_019075.2](#), [NP\\_061948.1](#)

**RefSeq Size:** 2399 bp

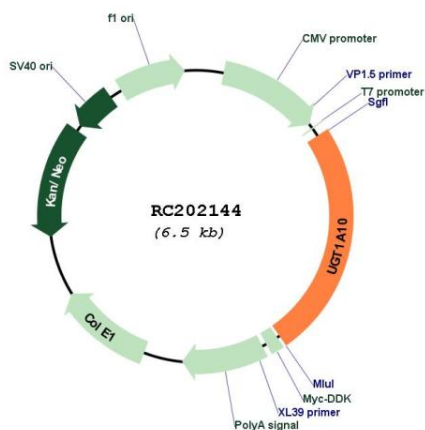
**RefSeq ORF:** 1593 bp

**Locus ID:** 54575

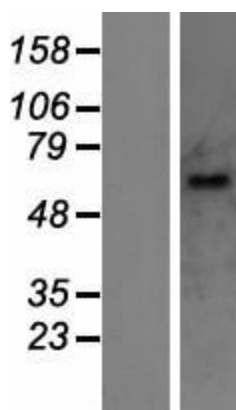
**UniProt ID:** [Q9HAW8](#)

<b>Cytogenetics:</b>	2q37.1
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	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
<b>MW:</b>	59.8 kDa
<b>Gene Summary:</b>	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 enzyme encoded by this gene has glucuronidase activity on mycophenolic acid, coumarins, and quinolines. [provided by RefSeq, Jul 2008]

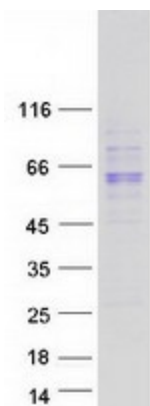
**Product images:**



Circular map for RC202144



Western blot validation of overexpression lysate (Cat# [LY412759]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202144 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UGT1A10 protein (Cat# [TP302144]). The protein was produced from HEK293T cells transfected with UGT1A10 cDNA clone (Cat# RC202144) using MegaTran 2.0 (Cat# [TT210002]).