

Product datasheet for **RC214521**

UGT1A8 (NM_019076) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UGT1A8 (NM_019076) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UGT1A8
Synonyms:	GNT1; hUG-BR1; UDPGT; UDPGT 1-1; UDPGT 1-8; UGT-1A; UGT-1H; UGT1; UGT1-01; UGT1-08; UGT1.1; UGT1.8; UGT1A; UGT1A1; UGT1A8S; UGT1H
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC214521 representing NM_019076
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTCGCACAGGGTGGACCAGCCCCATTCCCCTATGTGTTTCTCTGCTGCTGACCTGTGGCTTTGCTG
 AGGCAGGGAAGCTGCTGGTAGTGCCCATGGATGGGAGTCACTGGTTCACCATGCAGTCGGTGGTGGAGAA
 ACTTATCCTCAGGGGCATGAGGTGTTGTAGTCATGCCAGAGGTGAGTTGGCAACTGGGAAAATCACTG
 AATTGCACAGTGAAGACTTACTCAACCTCATACACTCTGGAGGATCTGGACCGGGAATTCATGGATTTCCG
 CCGATGCTCAATGGAAAGCACAAGTACGAAGTTTGTTCCTATTTCTGAGTTCATCCAATGGTTTTTTT
 TAACTATTTTTTTCGATTGCAGGAGTTGTTAATGACCGAAAATTAGTAGAATACTTAAAGGAGAGT
 TCTTTTGTATGCGGTGTTTCTTGATCCTTTTGATGCCTGTGGCTAATTGTTGCCAAATATTTCTCCCTCC
 CCTCTGTGGTCTTCGCCAGGGGAATAGCTTGCCACTATCTTGAAGAAGGTGCACAGTGCCTGCTCTCT
 TTCCTATGTCCCAGAATTCTCTTAGGGTCTCAGATGCCATGACTTTCAAGGAGAGAGTACGGAACCAC
 ATCATGCACTTGGAGGAACATTTATTTTGCAGTATTTTCCAAAAATGCCCTAGAAATAGCCTCTGAAA
 TTCTCCAAACACCTGTCACAGCATATGATCTCTACAGCCACACATCAATTTGGTTGTTGCCAACAGACTT
 TGTTTTGGACTATCCCAAACCCGTGATGCCAATATGATCTTCATTGGTGGTATCAACTGCCATCAGGGA
 AAGCCATTGCCTATGGAATTTGAAGCCTACATTAATGCTTCTGGAGAACATGGAATTGTGGTTTTCTCTT
 TGGGATCAATGGTCTCAGAAATTCAGAGAAGAAAGCTATGGCAATTGCTGATGCTTTGGGCAAAATCCC
 TCAGACAGTCTGTGGCGGTACACTGGAACCCGACCATCGAATCTTGGCAACAACACGATACTTGTAAAG
 TGGTACCCCAAAACGATCTGCTTGGTCACCCGATGACCCGTGCCTTTATCACCCATGCTGGTCCCATG
 GTGTTTATGAAAGCATATGCAATGGCGTCCCATGGTGATGATGCCCTTGTGGTGATCAGATGGACAA
 TGCAAAGCGCATGGAGACTAAGGGAGCTGGAGTGACCCTGAATGTTCTGGAAATGACTTCTGAAGATTTA
 GAAAATGCTCTAAAAGCAGTCAATGACAAAAGTTACAAGGAGAACATCATGCGCCTCTCCAGCCTTC
 ACAAGGACCGCCCGTGGAGCCGCTGGACCTGGCCGTGTTCTGGGTGGAGTTTGTGATGAGGCACAAGGG
 CGCGCCACACCTGCGCCCGCAGCCACGACCTCACCTGGTACCAGTACCATTCTTGGACGTGATTGGT
 TTCCTCTGGCCGTCGTGCTGACAGTGGCCTTCATCACCTTTAAATGTTGTGCTTATGGCTACCGGAAAT
 GCTTGGGAAAAAAGGGCGAGTTAAGAAAGCCCAAAATCCAAGACCCAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC214521 representing NM_019076
 Red=Cloning site Green=Tags(s)

MARTGWTSPIPLCVSLLLTTCGFAEAGKLLVVPMDGSHWFTMQSVVEKILIRGHEVVVMPEVSWQLGKSL
 NCTVKTYSTSYTLEDLDREFMDFADAQWKAQVRSLSLFLSSSNGFFNLFFSHCRSLFNDRKLVYELKES
 SFDAVFLDPFDACGLIVAKYFSLPSVVFARGIACHYLEEGAQCPAPLSYVPRILLGFSAMTFKERVNRH
 IMHLEEHLFCQYFSKNALEIASEILQTPVTAYDLYSHTSIWLLRTDFVLDYPKPVMNMIFIGGINCHQG
 KPLPMEFEAYINASGEHGI VVFSLSGSMVSEIPEKKAMAIADALGKIPQTVLWRYTGTRPSNLANNTILVK
 WLPQNDLLGHPMTRAFITHAGSHGVYESICNGVPMVMPLFGDQMDNAKRMETKGAGVTLNVLEMTSEDL
 ENALKAVINDKSYKENIMRLSSLHKDRPVEPLDLAVFWVEFVMRHKGAPHLRPAAHDLTWYQYHSLDVI
 FLLAVVLTVAFITFKCCAYGRKCLGKKGRVKKAHKSKTH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8030_e04.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_019076

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_019076.4](#), [NP_061949.3](#)

RefSeq Size: 2396 bp

RefSeq ORF: 1593 bp

Locus ID: 54576

UniProt ID: [Q9HAW9](#)

Cytogenetics: 2q37.1

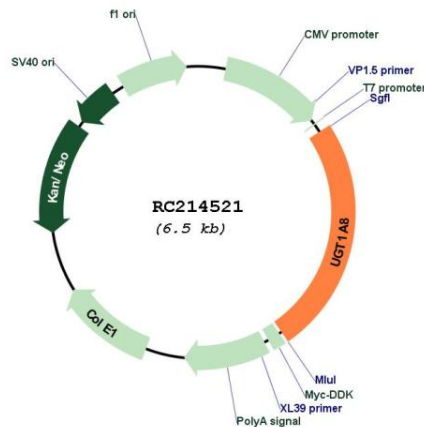
Protein Families: Transmembrane

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

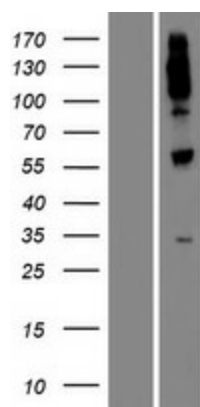
MW: 57.1 kDa

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 enzyme encoded by this gene has glucuronidase activity with many substrates including coumarins, phenols, anthraquinones, flavones, and some opioids. [provided by RefSeq, Jul 2008]

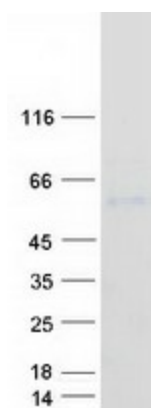
Product images:



Circular map for RC214521



Western blot validation of overexpression lysate (Cat# [LY412760]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214521 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UGT1A8 protein (Cat# [TP314521]). The protein was produced from HEK293T cells transfected with UGT1A8 cDNA clone (Cat# RC214521) using MegaTran 2.0 (Cat# [TT210002]).