

Product datasheet for **RC216266**

UGT1A3 (NM_019093) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UGT1A3 (NM_019093) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UGT1A3
Synonyms:	UDPGT; UDPGT 1-3; UGT-1C; UGT1-03; UGT1.3; UGT1A3S; UGT1C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC216266 representing NM_019093
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCACAGGACTCCAGGTTCCCTCGCGTGGCTGGCCACAGGACTGCTGCTTCTCCTCAGTGTCCAGC
 CCTGGGCTGAGAGTGAAAGGTGTTGGTGGTGCCTTATGATGGCAGCCACTGGCTCAGCATGCGGGAGGT
 CTTGCGGGAGCTCCATGCCAGAGGCCACAGGCGTGGTCTCACCCAGAGGTGAATATGCACATCAAA
 GAAGAGAAGCTTTTACCCCTGACAACTATGCCATTCGTGGACCCAGGATGAATTTGATCGCCATGTGC
 TGGGCCACTCAACTGTACTTTGAAACAGAACATTTTCTGAAGAAATTTTTCAGAAGTATGGCAATGTT
 GAACAATATGCTTTGGTCTATCATAGGCTTGTGTGGAGCTACTACATAATGAGGCCCTGATCAGGCAC
 CTGAATGCTACTTCTTTGATGTGGTTTTAACAGACCCCGTTAACCTCTGCGCGGAGTGTGGCTAAGT
 ACCTGTCGATTCTACTGTGTTTTTTTGGAGAACATTCATGTGATTTAGACTTTAAGGGCACACAGTG
 TCCAAACCCTTCTCTATATTCCTAGATTACTAACAACCAATTCAGACCACATGACATTCATGCAAGG
 GTCAAGAACATGCTCTACCCCTCTGGCCCTGCTACATTTGCCATGCTTTTTCTGCTCCTTATGCAAGCC
 TTGCTCTGAGCTTTTTAGAGAGAGGTGTCAAGTGGTGGATATTCTCAGTCATGCATCTGTGTGGCTGTT
 CCGAGGGGACTTTGTGATGGACTACCCAGGCCAATCATGCCAACATGGTCTTCATTGGGGGCATCAAC
 TGTGCCAACAGGAAGCCACTATCTCAGGAATTTGAAGCCTACATTAATGCTTCTGGAGAACATGGAATTG
 TGGTTTTCTTTGGGATCAATGGTCTCAGAAATTCAGAGAAGAAAGCTATGGCAATTGCTGATGCTTT
 GGGCAAAATCCCTCAGACAGTCTGTGGCGGTACTGGAACCCGACCATCGAATCTTGGCAACAACAGC
 ATACTTGTAAAGTGGCTACCCAAAACGATCTGCTTGGTACCCGATGACCCGTGCCTTTATCACCCATG
 CTGGTTCATGGTGTATGAAAGCATATGCAATGGCCTTCCATGGTGTGATGATGCTTTGTTGGTGA
 TCAGATGGACAATGCAAAGCGCATGGAGACTAAGGGAGCTGGAGTGACCCTGAATGTTCTGGAAATGACT
 TCTGAAGATTTAGAAAATGCTCTAAAAGCAGTCATCAATGACAAAAGTTACAAGGAGAACATCATGCGCC
 TCTCCAGCCTTACAAGGACCGCCCGTGGAGCCGCTGGACCTGGCCGTGTTCTGGGTGGAGTTTGTGAT
 GAGGCACAAGGGCGGCCACACCTGCGCCCCGAGCCACGACCTCACCTGGTACCAGTACCATTCTTGTG
 GACGTGATTGGTTTCTCTTGGCCGTGCTGCTGACAGTGGCCTTCATCACCTTTAAATGTTGTGCTTATG
 GCTACCGGAAATGCTTGGGGAAAAAGGGCGAGTTAAGAAAGCCCAAAATCCAAGACCCAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216266 representing NM_019093
 Red=Cloning site Green=Tags(s)

MATGLQVPLPWLATGLLLLLSVQPWAESGKVLVVPIDGSHWLSMREVLRELHARGHQAVVLTPENVMHK
 EENFFTLTTYAISWTQDEFDRHVLGHTQLYFETEHLKFFRSMAMLNMSLVYHRSCVELLHNEALIRH
 LNATSFVVL TDPVNLCAAVLAKYLSIPTVFFLRNIPCDLDFKGTQCPNPSSYIPRLTTNSDHMTFMQR
 VKNMLYPLALSYICHAFSAPYASLASELFQREVSVDILSHASVWVFRGDFVMDYPRPIMPNMVFIGGIN
 CANRKPLSQEFAYINASGEHGI VVFLGSMVSEIPEKKAMAIADALGKIPQTVLWRYTGRPSNLANNT
 ILVKWLPQNDLLGHPMTRAFITHAGSHGVYESICNGVPMVMPLFGDQMDNAKRMETKGAGVTLNVLEMT
 SEDLENALKAVINDKSYKENIMRLSSLHKDRPVEPLDLAVFWVEFVMRHKGAPHLRPAHADLTWYQYHSL
 DVI GFLLA VVLTVAFITFKCCAYGYRKLKGGKGRVKKAHKSKTH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8010_a11.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_019093

ORF Size: 1602 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_019093.4](#)

RefSeq Size: 2345 bp

RefSeq ORF: 1605 bp

Locus ID: 54659

UniProt ID: [P35503](#)

Cytogenetics: 2q37.1

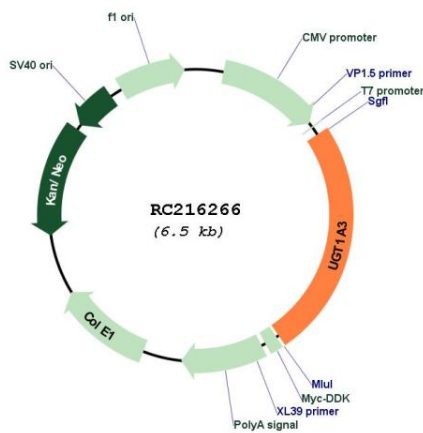
Protein Families: Transmembrane

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

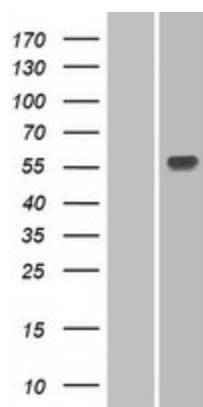
MW: 57.3 kDa

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. Substrates of this enzyme include estrone, 2-hydroxyestrone, and metabolites of benzo alpha-pyrene. [provided by RefSeq, Jul 2008]

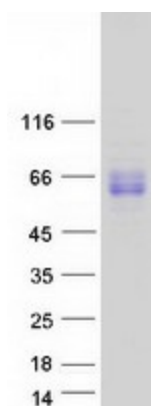
Product images:



Circular map for RC216266



Western blot validation of overexpression lysate (Cat# [LY412752]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216266 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UGT1A3 protein (Cat# [TP316266]). The protein was produced from HEK293T cells transfected with UGT1A3 cDNA clone (Cat# RC216266) using MegaTran 2.0 (Cat# [TT210002]).