

Product datasheet for **RG219801**

UGT1A4 (NM_007120) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UGT1A4 (NM_007120) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	UGT1A4
Synonyms:	GNT1; hUG-BR1; HUG-BR2; UDPGT; UDPGT 1-4; UGT-1A; UGT-1D; UGT1; UGT1-01; UGT1-04; UGT1.1; UGT1.4; UGT1A; UGT1A1; UGT1A4S; UGT1D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG219801 representing NM_007120
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCAGAGACTCCAGGTTCCCTGCCGCGCTGGCCACAGGACTGCTGCTCCTCCTCAGTGTCCAGC
 CCTGGGCTGAGAGTGGAAAGGTGTTGGTGGTCCCACTGATGGCAGCCCTGGCTCAGCATGCGGGAGGC
 CTTGCGGGAGCTCCATGCCAGAGGCCACAGGCGGTGGTCTCACCCAGAGGTGAATATGCACATCAAA
 GAAGAGAAATTTTTCACCTGACAGCCTATGCTGTTCCATGGACCAGAAGGAATTTGATCGCGTTACGC
 TGGGCTACACTCAAGGGTCTTTGAAACAGAACATCTTCTGAAGAGATATTCTAGAAGTATGGCAATTAT
 GAACAATGTATCTTTGGCCCTTCATAGGTGTTGTGTGGAGCTACTGCATAATGAGGCCCTGATCAGGCAC
 CTGAATGCTACTTCTTTGATGTGGTTTTAACAGACCCCGTTAACCTCTGTGGGGCGGTGCTGGCTAAGT
 ACCTGTCGATTCTGCTGTGTTTTTTGGAGGTACATTCCATGTGACTTAGACTTTAAGGGCACACAGTG
 TCCAAATCCTTCTCCTATATTCCTAAGTTACTAACGACCAATTCAGACCACATGACATTCTGCAAAGG
 GTCAAGAACATGCTCTACCCTCTGGCCCTGTCTACATTTGCCACTTTTTCTGCCCTTATGCAAGTC
 TTGCCTCTGAGCTTTTTAGAGAGAGGTGTCAGTGGTGGATCTTGTGAGCTATGCATCCGTGGCTGTT
 CCGAGGGGACTTTGTGATGGACTACCCAGGCCGATCATGCCAACATGGTCTTCATTGGGGGCATCAAC
 TGTGCCAACGGGAAGCCACTATCTCAGGAATTTGAAGCCTACATTAATGCTTCTGGAGAACATGGAATTG
 TGGTTTTCTCTTTGGGATCAATGGTCTCAGAAATTCAGAGAAGAAAGCTATGGCAATTGCTGATGCTTT
 GGGCAAATCCCTCAGACAGTCTGTGGCGGTACTGGAACCCGACCATCGAATCTTGGCAACAACACG
 ATACTTGTAAAGTGGCTACCCAAAACGATCTGCTTGGTCACCCGATGACCCGTGCCTTTATCACCCATG
 CTGGTCCCATGGTGTATGAAAGCATATGCAATGGCCTTCCCATGGTATGATGCCCTTGTGTTGGTGA
 TCAGATGGACAATGCAAAGCGCATGGAGACTAAGGGAGCTGGAGTGACCCTGAATGTTCTGGAAATGACT
 TCTGAAGATTTAGAAAATGCTCTAAAAGCAGTCATCAATGACAAAAGTTACAAGGAGAACATCATGCGCC
 TCTCCAGCCTTACAAGGACCGCCCGGTGGAGCCGCTGGACCTGGCCGTGTTCTGGGTGGAGTTTGTGAT
 GAGGCACAAGGGCGGCCACACCTGCGCCCGCAGCCACGACCTCACCTGGTACCAGTACCATTCTTG
 GACGTGATTGTTTCTCTTGGCCGTCGTGCTGACAGTGGCCTTCATCACCTTTAAATGTTGTGCTTATG
 GCTACCGAAATGCTTGGGGAAAAAAGGGCGAGTTAAGAAAGCCCAAAATCCAAGACCCAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG219801 representing NM_007120
 Red=Cloning site Green=Tags(s)

MARGLQVPLPRLATGLLLLLSVQPWAESGKVLVPTDGSPLSMREALRELHARGHQAVVLTPEVNMHIK
 EEKFFTLTAYAVPWTQKEFDRVTLGYTQGFETEHLKRYSRSMAMNNSLALHRCCVELLHNEALIRH
 LNATSFVVLTDVNLGAVLAKYLSIPAVFFWRYIPCDLDFKGTQCPNPSSYIPKLLTNSDHMTFLQR
 VKNMLYPLALSYICHTFSAPYASLASELFQREVSVDLVSYASVWLFRGDFVMDYPRPIMPNMVFIGGIN
 CANGKPLSQEFEAYINASGEHGI VVFLGSMVSEIPEKKAMAIADALGKIPQTVLWRYTGRPSNLANN
 ILVKWLPQNDLLGHPMTRAFITHAGSHGVYESICNGVPMVMPLFGDQMDNAKRMETKGAGVTLNVLEMT
 SEDLENALKAVINDKSYKENIMRSSLHKDRPVEPLDLAVFWVEFVMRHKGAPHLRPAHDLTWYQYHSL
 DVIGFLLAVVLTVAFITFKCCAYGYRKLKGGKGRVKKAHKSKTH

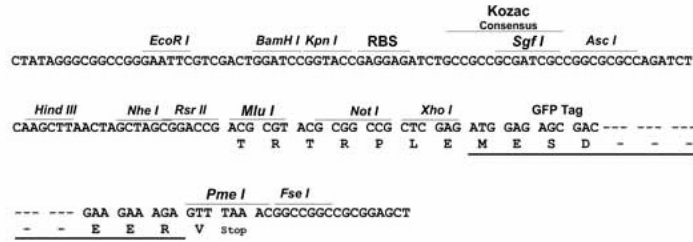
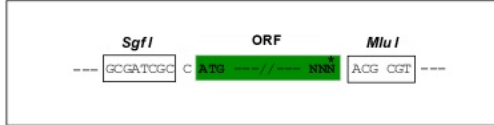
TRTRPLE - GFP Tag - V

Restriction Sites:

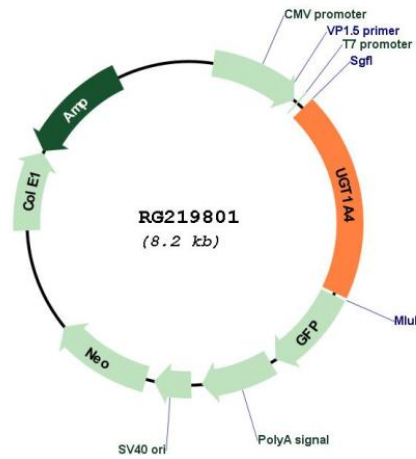
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN:

NM_007120

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:	<ol style="list-style-type: none">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_007120.3
RefSeq Size:	2374 bp
RefSeq ORF:	1605 bp
Locus ID:	54657
UniProt ID:	P22310
Cytogenetics:	2q37.1
Domains:	UDPGT
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

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. This enzyme has some glucuronidase activity towards bilirubin, although is more active on amines, steroids, and sapogenins. [provided by RefSeq, Jul 2008]