

# Product datasheet for RC213439L3

### OriGene Technologies, Inc.

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## UGT (UGT1A1) (NM\_000463) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: UGT (UGT1A1) (NM\_000463) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: UGT

Synonyms: BILIQTL1; GNT1; HUG-BR1; UDPGT; UDPGT 1-1; UGT1A

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC213439).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





st The last codon before the Stop codon of the ORF.

**ACCN:** NM\_000463

ORF Size: 1599 bp





### UGT (UGT1A1) (NM\_000463) Human Tagged Lenti ORF Clone - RC213439L3

**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:** <u>NM 000463.2</u>

 RefSeq Size:
 2357 bp

 RefSeq ORF:
 1602 bp

 Locus ID:
 54658

 UniProt ID:
 P22309

 Cytogenetics:
 2q37.1

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

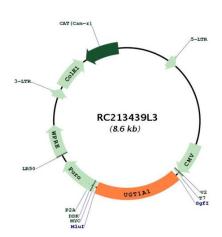
**MW:** 59.6 kDa



#### **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 preferred substrate of this enzyme is bilirubin, although it also has moderate activity with simple phenols, flavones, and C18 steroids. Mutations in this gene result in Crigler-Najjar syndromes types I and II and in Gilbert syndrome. [provided by RefSeq, Jul 2008]

## **Product images:**



Circular map for RC213439L3