

## Product datasheet for **RG221202**

### SLC10A2 (NM\_000452) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SLC10A2 (NM\_000452) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** SLC10A2  
**Synonyms:** ASBT; IBAT; ISBT; NTCP2; PBAM  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG221202 representing NM\_000452  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAATGATCCGAACAGCTGTGTGGACAATGCAACAGTTTGTCTGGTGCATCCTGTGTGGTACCTGAGA  
GCAATTTCAATAACATCCTAAGTGTGGTCTAAGTACGGTGTGACCATCCTGTTGGCCTTGGTATGTT  
CTCCATGGGATGCAACGTGGAAATCAAGAAATTTCTAGGGCACATAAAGCGGCCGTGGGGCATTGTGTT  
GGCTTCTCTGTCAGTTTGAATCATGCCCTCACAGGATTCATCCTGTGCGGTGGCCTTTGACATCCTCC  
CGCTCCAGGCCGTAGTGGTGTCTATTATAGGATGTGCCCTGGAGGAAGTGCCTCCAATATCTTGGCCTA  
TTGGGTGATGGCGACATGGACCTGAGCGTCAGCATGACCACATGCTCCACACTGCTTGGCCTCGGAATG  
ATGCCGCTGTGCCTCCTTATCTATACAAAATGTGGTGTGACTCTGGGAGCATCGTAATTCCTATGATA  
ACATAGGTACATCTGTGTTGCTCTCGTTGTTCCATTGGAATGTTTGTAAATCACAAATGGCC  
CCAAAAGCAAAGATCATACTTAAAATGGGTCCATCGCGGGCGCCATCCTCATTGTGCTCATAGCTGTG  
GTTGGAGGAATATTGTACCAAAGCGCCTGGATCATTGCTCCAAACTGTGGATTATAGGAACAATATTTCT  
CTGTGGCGGGTACTCCCTGGGTTTCTTCTGGCTAGAATTGCTGGTCTACCTGGTACAGGTGCCGAAC  
GGTTGCTTTTGAACGGGGATGCAGAACACGCAGCTATGTTCCACCATCGTTCAGCTCTCCTTCACTCCT  
GAGGAGCTCAATGTCGTATTCACCTTCCCGCTCATCTACAGCATTTTCCAGCTCGCCTTTGCCGAATAT  
TCTTAGGATTTTATGTGGCATACAAGAAATGTCATGGAAAAACAAGGCAGAAATTCAGAGAGCAAAGA  
AAATGGAACGGAGCCAGAGTCATCGTTTTATAAGGCAAATGGAGGATTTCAACCTGACGAAAAAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG221202 representing NM\_000452  
 Red=Cloning site Green=Tags(s)

MNDPNSCVDNATVCSGASCVVPESNFNNILSVLSTVL TILLALVMFSMGCNVEIKKFLGHIKRPWGICV  
 GFLCQFGIMPLTGFILSVAFDILPLQAVVLIIGCCPGGTASNILAYWVDGMDL SVSMTTCSTLLALGM  
 MPLCLLIYTKMWVDSGSIVIPYDNI G TSLVALVVPV SIGMFVNHKWPQKAKIILKIGSIAGAILIVLIAV  
 VGGILYQSAWIIAPKLWIIIGTIFPVAGYSLGFL LARIAGLPWYRCRTVAFETGMQNTQLCSTIVQLSFTP  
 EELNVVFTFPLIYSIFQLAFAAIFLGFYVAYKKCHGKNKAEIPESKENGTEPESSFYKANGGFQPDEK

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_000452

**ORF Size:** 1044 bp

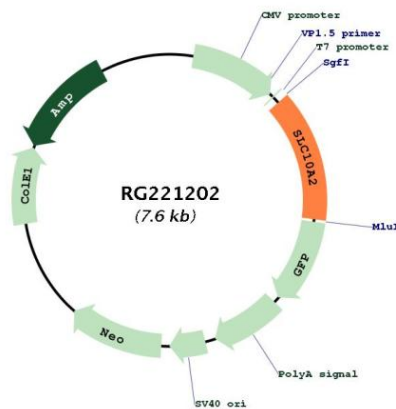
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u>NM_000452.2, NP_000443.1</u>
<b>RefSeq Size:</b>	3779 bp
<b>RefSeq ORF:</b>	1047 bp
<b>Locus ID:</b>	6555
<b>UniProt ID:</b>	<u>Q12908</u>
<b>Cytogenetics:</b>	13q33.1
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Gene Summary:</b>	This gene encodes a sodium/bile acid cotransporter. This transporter is the primary mechanism for uptake of intestinal bile acids by apical cells in the distal ileum. Bile acids are the catabolic product of cholesterol metabolism, so this protein is also critical for cholesterol homeostasis. Mutations in this gene cause primary bile acid malabsorption (PBAM); mutations in this gene may also be associated with other diseases of the liver and intestines, such as familial hypertriglyceridemia (FHTG). [provided by RefSeq, Mar 2010]

**Product images:**



Circular map for RG221202