

## Product datasheet for **RC210241**

### SLC10A1 (NM\_003049) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SLC10A1 (NM\_003049) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** SLC10A1  
**Synonyms:** FHCA2; NTCP  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC210241 representing NM\_003049  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGAGGCCACAACGCGTCTGCCCATTCAACTTCACCCTGCCACCAACTTTGGCAAGCGCCCCACAG  
ACCTGGCACTGAGCGTCATCCTGGTGTTTCATGTTGTTCTTCATCATGCTCTCGCTGGGCTGCACCATGGA  
GTTTCAGCAAGATCAAGGCTCACTTATGGAAGCCTAAAGGGCTGGCCATCGCCCTGGTGGCACAGTATGGC  
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TGGTCTGTGGCTGCTCACCTGGAGGAACTGTCCAATGTCTTCAGTCTGGCCATGAAGGGGACATGAA  
CCTCAGCATTGTGATGACCACCTGCTCCACCTTCTGTGCCCTTGGCATGATGCCTCTCCTCTGTACATC  
TACTCCAGGGGATCTATGATGGGGACCTGAAGGACAAGGTGCCCTATAAAGGCATCGTGATATCACTGG  
TCCTGGTTCTCATTCCCTGCACCATAGGGATCGTCCTCAAATCCAAACGGCCACAATACATGCGCTATGT  
CATCAAGGGAGGGATGATCATCATTCTTGTGCAAGTGTGGCCGTACAGTTCTCTCTGCCATCAATGTG  
GGGAAGAGCATCATGTTTGCCATGACACCACTTGTGATGGCACCTCCTCCCTGATGCCTTTTATTGGCT  
TTCTGTGGGTTATGTTCTCTGCTCTTCTGCCTCAATGGACGGTGCAGACGCACTGTCAGCATGGA  
GACTGGATGCCAAAATGTCCAACCTGTTCACCATCCTCAATGTGGCCTTTCCACCTGAAGTCATTGGA  
CCACTTTTCTTTCCCTCCTACATGATTTTCCAGCTTGGAGAAGGGCTTCTCCTCATTGCCATAT  
TTTGGTCTATGAGAAATCAAGACTCCCAAGGATAAAAACAAAATGATCTACACAGCTGCCACAACCTGA  
AGAAACAATTCCAGGAGCTCTGGGAAATGGCACCTACAAAGGGGAGGACTGCTCCCTTGCACAGCC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC210241 representing NM\_003049  
Red=Cloning site Green=Tags(s)

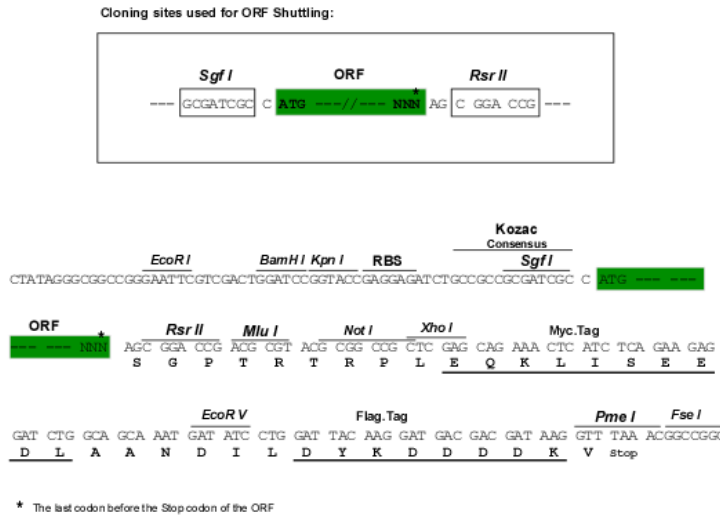
MEAHNASAPFNFTLPPNFGKRPTDLALSVILVFMLFFIMLSLGGCTMEFSKIKAHLWPKGLAIALVAQYG  
 IMPLTAFVLGKVFRLKNIEALAILVCGCSPGGNLSNVFSLAMKGMNLSIVMTTCSTFCALGMPPLLYI  
 YSRGIYDGDLDKDKVPYKIGIVISLVLVLPCTIGIVLKSRRPQYMRVYIKGGMIIILLCSVAVTVLSAINV  
 GKSIMFAMTPLLIAATSSLMPFIFLLGYVLSALFCLNGRCRRTVSMETGCQNVQLCSTILNVAFPPEVIG  
 PLFFFPLLYMIFQLGEGLLLIAIFWCYEKFKTPKDKTKMIYTAATTEETIPGALNGTYKGEDCSPCTA

SGPTRTRRLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2762\\_c06.zip](https://cdn.origene.com/chromatograms/mg2762_c06.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_003049

**ORF Size:** 1047 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_003049.4](#)

**RefSeq Size:** 1580 bp

**RefSeq ORF:** 1050 bp

**Locus ID:** 6554

**UniProt ID:** [Q14973](#)

**Cytogenetics:** 14q24.1

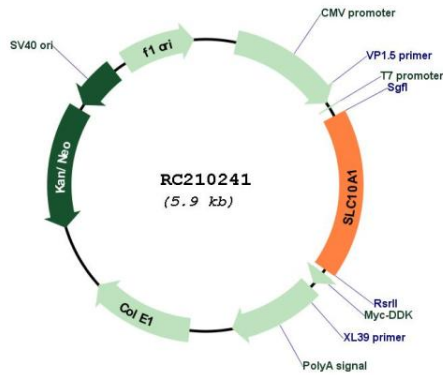
**Domains:** SBF

**Protein Families:** Druggable Genome, Transmembrane

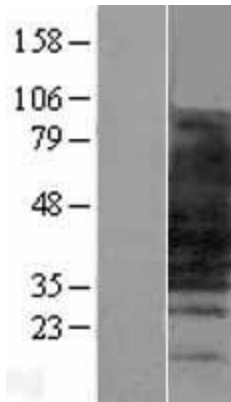
**MW:** 37.9 kDa

**Gene Summary:** The protein encoded by this gene belongs to the sodium/bile acid cotransporter family, which are integral membrane glycoproteins that participate in the enterohepatic circulation of bile acids. Two homologous transporters are involved in the reabsorption of bile acids; the ileal sodium/bile acid cotransporter with an apical cell localization that absorbs bile acids from the intestinal lumen, bile duct and kidney, and the liver-specific sodium/bile acid cotransporter, represented by this protein, that is found in the basolateral membranes of hepatocytes. Bile acids are the catabolic product of cholesterol metabolism, hence this protein is important for cholesterol homeostasis. [provided by RefSeq, Oct 2011]

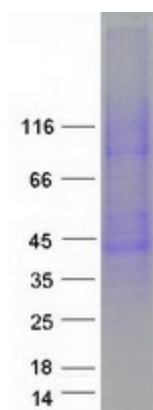
Product images:



Circular map for RC210241



Western blot validation of overexpression lysate (Cat# [LY418929]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210241 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SLC10A1 protein (Cat# [TP310241]). The protein was produced from HEK293T cells transfected with SLC10A1 cDNA clone (Cat# RC210241) using MegaTran 2.0 (Cat# [TT210002]).