

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**CGATCGCC**

ATGGAGGCCACAACGCGTCTGCCCATTCAACTTCACCCTGCCACCCAACCTTGGCAAGCGCCCCACAG
ACCTGGCACTGAGCGTCATCCTGGTGTTTCATGTTGTTCTTCATCATGCTCTCGCTGGGCTGCACCATGGA
GTTTCAGCAAGATCAAGGCTCACTTATGGAAGCCTAAAGGGCTGGCCATCGCCCTGGTGGCACAGTATGGC
ATCATGCCCTCACGGCCTTTGTGCTGGCAAGGTCTTCCGGCTGAAGAACATTGAGGCACTGGCCATCT
TGGTCTGTGGCTGCTCACCTGGAGGAACTGTCCAATGTCTTCAGTCTGGCCATGAAGGGGACATGAA
CCTCAGCATTGTGATGACCACCTGCTCCACCTTCTGTGCCCTTGGCATGATGCCTCTCCTCTGTACATC
TACTCCAGGGGATCTATGATGGGGACCTGAAGGACAAGGTGCCCTATAAAGGCATCGTGATATCACTGG
TCCTGGTTCTCATTCCCTGCACCATAGGGATCGTCCTCAAATCCAAACGGCCACAATACATGCGCTATGT
CATCAAGGGAGGGATGATCATCATTCTTGTGCAAGTGTGGCCGTACAGTTCTCTGCCATCAATGTG
GGGAAGAGCATCATGTTTGCCATGACACCACTTGTGATGGCACCTCCTCCCTGATGCCTTTTATTGGCT
TTCTGTGGTTATGTTCTCTGCTCTTCTGCCTCAATGGACGGTGCAGACGCACTGTCAGCATGGA
GACTGGATGCCAAAATGTCCAACCTGTTCACCATCCTCAATGTGGCCTTTCCACCTGAAGTCATTGGA
CCACTTTTCTTCCCTCCTACATGATTTTCCAGCTTGGAGAAGGGCTTCTCCTCATTGCCATAT
TTTGGTCTATGAGAAATCAAGACTCCCAAGGATAAAACAAAATGATCTACACAGCTGCCACAACCTGA
AGAAACAATTCCAGGAGCTCTGGGAAATGGCACCTACAAAGGGGAGGACTGCTCCCTTGACAGCC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC210241 representing NM_003049
Red=Cloning site Green=Tags(s)

```
MEAHNASAPFNFTLPPNFGKRPTDLALSVILVFMLFFIMLSLGGCTMEFSKIKAHLWPKGLAIALVAQYG
IMPLTAFVLGKVFRLKNIEALAILVCGCSPGGNLSNVFSLAMKGMNLSIVMTTCSTFCALGMPPLLYI
YSRGIYDGLDKDKVPYKGIIVISLVLVLPCTIGIVLKSQRQPQYMRVVIKGGMIILLCSVAVTLSAINV
GKSIMFAMTPLLIAATSSLMPFIFGLLGYVLSALFCLNGRCRRTVSMETGCQNVQLCSTILNVAFPPEVIG
PLFFFPLLYMIFQLGEGLLLI AIFWCYEKFKTPKDKTKMIYTAATTEETIPGALNGTYKGEDCSPCTA
```

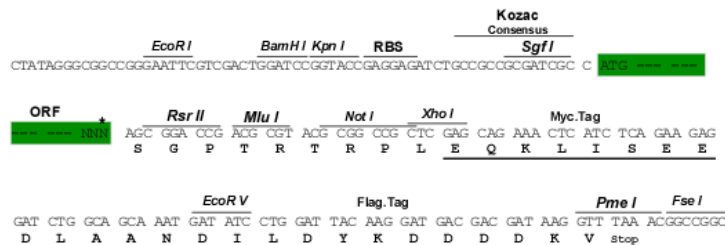
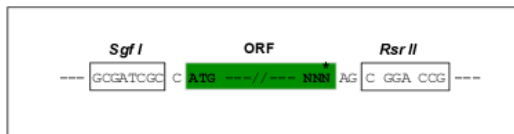
SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2762_c06.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_003049

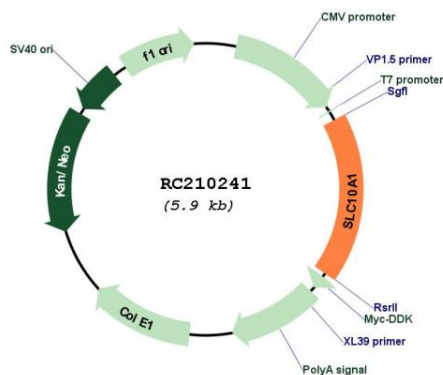
ORF Size: 1047 bp

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 or by calling 301.340.3188 option 3 for pricing and delivery.

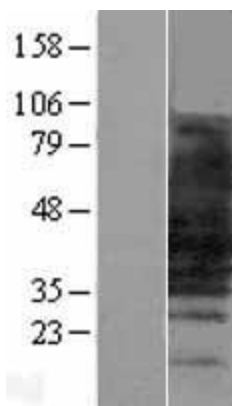
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
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_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]

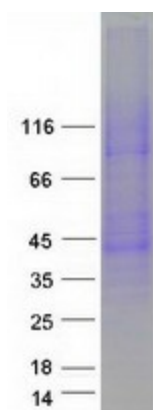
Product images:



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]).