

Product datasheet for RC221202

SLC10A2 (NM_000452) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SLC10A2 (NM_000452) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: SLC10A2
Synonyms: ASBT; IBAT; ISBT; NTCP2; PBAM
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC221202 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAATGATCCGAACAGCTGTGTGGACAATGCAACAGTTTGTCTGGTGCATCCTGTGTGGTACCTGAGA
 GCAATTTCAATAACATCCTAAGTGTGGTCTAAGTACGGTGTGACCATCCTGTTGGCCTTGGTATGTT
 CTCCATGGGATGCAACGTGGAAATCAAGAAATTTCTAGGGCACATAAAGCGGCCGTGGGGCATTGTGTT
 GGCTTCTCTGTCAGTTTGAATCATGCCCTCACAGGATTCATCCTGTGGTGGCCTTTGACATCCTCC
 CGCTCCAGGCCGTAGTGGTGTCTATTATAGGATGCTGCCCTGGAGGAAGTGCCTCCAATATCTTGGCCTA
 TTGGGTGATGGCGACATGGACCTGAGCGTCAGCATGACCACATGCTCCACACTGCTTGGCCTCGGAATG
 ATGCCGCTGTGCCTCCTTATCTATACAAAATGTGGTTCGACTCTGGGAGCATCGTAATTCCTATGATA
 ACATAGGTACATCTGTGTTGCTCTCGTTGTTCCATTGGAATGTTTGTAAATCACAAATGGCC
 CCAAAAAGCAAAGATCATACTTAAAATGGGTCCATCGCGGGCGCCATCCTCATTGTGCTCATAGCTGTG
 GTTGGAGGAATATTGTACCAAAGCGCCTGGATCATTGCTCCAAACTGTGGATTATAGGAACAATATTTCT
 CTGTGGCGGGTACTCCCTGGGTTTCTTCTGGCTAGAATTGCTGGTCTACCTGGTACAGGTGCCGAAC
 GGTTGCTTTTGAACGGGGATGCAGAACACGCAGCTATGTTCCACCATCGTTCAGCTCCTCTTCACTCCT
 GAGGAGCTCAATGTCGTATTCACCTTCCCGCTCATCTACAGCATTTTCCAGCTCGCCTTTGCCGAATAT
 TCTTAGGATTTTATGTGGCATAACAAGAAATGTCATGGAAAAACAAGGCAGAAATTCAGAGACAAAGA
 AAATGGAACGGAGCCAGAGTCATCGTTTTATAAGGCAAATGGAGGATTTCAACCTGACGAAAAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC221202 protein sequence
Red=Cloning site Green=Tags(s)

MNDPNSCVDNATVCSGASCVVPESNFNNILSVLSTVL TILLALVMFSMGCNVEIKKFLGHIKRPWGICV
 GFLCQFGIMPLTGFILSVAFDILPLQAVVLIIGCCPGGTASNILAYWVDGMDLSVSMTCSTLLALGM
 MPLCLLIYTKMWVDSGSIVIPYDNIGTSLVALVVPVSI GMFVNHKWPQKAKIILKIGSIAGAILIVLIAV
 VGGILYQSAWIIAPKLWIIGTIFPVAGYSLGFL LARIAGLPWYRCRTVAFETGMQNTQLCSTIVQLSFTP
 EELNVVFTFPLIYSIFQLAFAAIFLGFYVAYKKCHGKNKAEIPESKENGTEPESSFYKANGGFQPDEK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6606_d02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000452

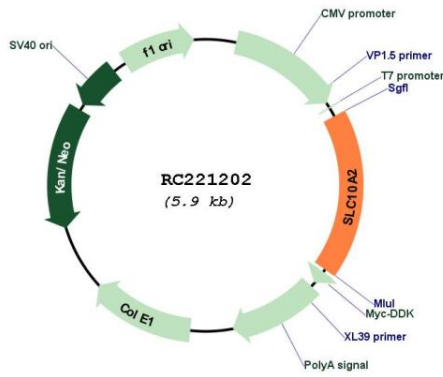
ORF Size: 1044 bp

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 or by calling 301.340.3188 option 3 for pricing and delivery.

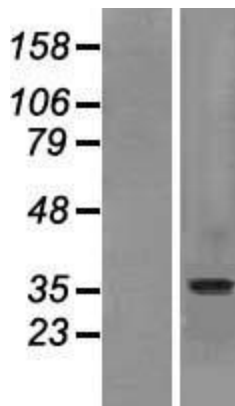
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_000452.2 , NP_000443.1
RefSeq Size:	3779 bp
RefSeq ORF:	1047 bp
Locus ID:	6555
UniProt ID:	Q12908
Cytogenetics:	13q33.1
Protein Families:	Druggable Genome, Transmembrane
MW:	37.7 kDa
Gene Summary:	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 RC221202



Western blot validation of overexpression lysate (Cat# [LY424708]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221202 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).