

Product datasheet for **RG207921**

SLC22A2 (NM_003058) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC22A2 (NM_003058) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC22A2
Synonyms:	OCT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG207921 representing NM_003058
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCACCACCGTGGACGATGTCTGGAGCATGGAGGGAGTTCACTTTTTCCAGAAGCAAATGTTTT
 TCCTCTGGCTCTGCTCTCGGCTACCTTCGCGCCCATCTACGTGGGCATCGTCTTCTGGGCTTCACCCC
 TGACCACCGCTGCCGGAGCCCCGGAGTGGCCGAGCTGAGTCTGCGCTGCGGCTGGAGTCTCGAGAGGAA
 CTGAACTACACGGTGCCGGGCCAGGACCTGCGGGCGAAGCCTCCCAAGACAGTGTAGGCGCTACGAGG
 TGGACTGGAACCAGAGCACCTTCGACTGCGTGGACCCCTGGCCAGCCTGGACACCAACAGGAGCCGCT
 GCCACTGGGCCCTGCCGGGACGGCTGGGTGTACGAGACGCTGGCTCGTCCATCGTCACCGAGTTAAAC
 CTGGTATGTGCCAACTCCTGGATGTTGGACCTATTCCAGTCATCAGTGAATGTAGGATCTTTATTGGCT
 CTATGAGTATCGGCTACATAGCAGACAGGTTTGGCCGTAAGCTCTGCCTCCTAACTACAGTCCTCATAAA
 TGCTGCAGCTGGAGTTCTCATGGCCATTTCCCAACCTATACGTGGATGTTAATTTTTCGTTAATCCAA
 GGACTGGTCAGCAAAGCAGGCTGGTTAATAGGCTACATCCTGATTACAGAATTTGTTGGCGGAGATATC
 GGAGAACAGTGGGGATTTTTACCAAGTTGCCTATACAGTTGGGCTCCTGGTGCTAGCTGGGGTGGCTTA
 CGCACTTCCTCACTGGAGGTGGTTCAGTTCACAGTTGCTCTGCCCAACTTCTTCTTCTGCTCTATTAC
 TGGTGCATACCTGAGTCTCCAGGTGGCTGATCTCCAGAATAAGAAATGCTGAAGCCATGAGAATCATT
 AGCACATCGCAAAGAAAATGAAAATCTTACCCGCCTCCCTTCAGCGCCTGAGACTTGAAGAGGAAAC
 TGGCAAGAAATGAACCTTCATTTCTGACTTGGTCAGAACTCCTCAGATAAGGAAACATACTATGATA
 TTGATGTACAACCTGGTTCACGAGCTCTGTGCTACCAGGGCCTCATCATGCACATGGCCCTGCAGGTG
 ACAATCTACCTGGATTTCTTCTACTCTGCCCTGGTTGAATTCACAGCTGCCTCATCATCCTCAC
 CATCGACCGCATCGGACGCGTTACCCTTGGGCTGCATCAAATATGGTTGCAGGGCAGCCTGTCTGGCC
 TCAGTTTTTATACCTGGTATCTACAATGGCTAAAAATTATTATCTCATGCTTGGGAAGAATGGGATCA
 CAATGGCCTATGAGATAGTCTGCCTGGTCAATGCTGAGCTGTACCCACATTCTTAGGAATCTTGGCGT
 CCACATCTGTTCTCAATGTGTGACATTGGTGGCATCATCAGCCATTCTGGTCTACCGGCTCACTAAC
 ATCTGGCTTGAAGCTCCCGCTGATGGTTTTCGGCGTACTTGGCTTGGTGTGAGGTCTGGTCTGTTGC
 TTCCAGAACTAAAGGAAAGCTTTGCCTGAGACCATCGAGGAAGCCGAAATATGCAAAGACCAAGAAA
 AAATAAGAAAAGATGATTTACCTCCAAGTTCAGAACTAGACATTCCATTGAAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG207921 representing NM_003058
 Red=Cloning site Green=Tags(s)

MPTTVDDVLEHGGEFHFQKQMFLLALLSATFAPIYVIGIVFLGFTPDHRCRSPGVAELSLRCGWSPAEE
 LNYTVPGPAGEASPRQCRRYEVDWNQSTFDCVDPLASLDTNRSRLPLGPCRDGWVYETPGSSIVTEFN
 LVCANSWMLDLFQSSVNVGFFIGSMSIGYIADRFGRKLCLLTTVLINAAAGVLMASPTYTWMLIFRLIQ
 GLVSKAGWLIGYILITEFVGRRYRRTVGIYQVAYTVGLLVLAGVAYALPHWRWLQFTVALPNFFLLYY
 WCIPESRWLISQNKNAEAMRIIKHIAKNGKSLPASLQRLREEETGKKLNPSFLDLVTRTPQIRKHTMI
 LMYNWFSSVLYQGLIMHMGLAGDNIYLDFFYSALVEFPAAFMIILTIDRIGRRYPWAASNMVAGAACLA
 SVFIPGDLQWLKIIISCLGRMGITMAYEIVCLVNAELYPTFIRNLGVHICSSMCDIGGIIITPFLVYRLTN
 IWLELPLMVFGVLGLVAGGLVLLLPEKTKALPETIEEAENMQRPKNKEKMIYLQVQKLDIPLN

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_003058

ORF Size: 1665 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.

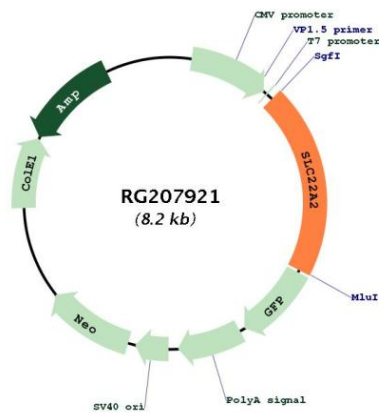
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:
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_003058.2, NP_003049.1](#)
RefSeq Size: 2512 bp
RefSeq ORF: 1668 bp
Locus ID: 6582
UniProt ID: [O15244](#)
Cytogenetics: 6q25.3
Protein Families: Transmembrane

Gene Summary: Polyspecific organic cation transporters in the liver, kidney, intestine, and other organs are critical for elimination of many endogenous small organic cations as well as a wide array of drugs and environmental toxins. This gene is one of three similar cation transporter genes located in a cluster on chromosome 6. The encoded protein contains twelve putative transmembrane domains and is a plasma integral membrane protein. It is found primarily in the kidney, where it may mediate the first step in cation reabsorption. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG207921