

## Product datasheet for **RR212184**

### Slc22a2 (NM\_031584) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Slc22a2 (NM_031584) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc22a2
Synonyms:	OCT2; OCT2r; rOCT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RR212184 representing NM\_031584  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGGATCGCC

ATGTGCACCGTGGATGATATTCTAGAACATATAGGGGAATTCACCTTTTTCAGAAACAAACATTTTTC  
 TCTTAGCTCTGCTGTCTGGTGCCTCACCCCATCTACGTGGGCATCGTTTTCTAGGATTACCCCTGA  
 CCACCACTGCTGGAGTCTGGGGCAGCCAAGCTGAGCCAGCGGTGTGGCTGGAGCCAGGCAGAGGAGCTG  
 AACTACACCGTGCCGGTCTGGGACCTTCGACGAGGCCTCCTTCCTCAGCCAGTGCATGAGGTATGAAG  
 TGGACTGGAACCAGAGCACCCCTGACTGTGTGGACCCACTGTCCAGCCTGGCTGCGGACAGGAACCAAGT  
 GCCATTGGGCCCTGCGAGCATGGCTGGGTATACAACACTCCCGCTCCTCATTGTCACTGAGTTAAAC  
 CTGGTGTGTGCTCACTCCTGGATGCTGGACCTGTTTCAGTCAGTAGTGAACGTGGGGTTTTTCATCGGTG  
 CTATGATGATTGGCTACCTAGCGGACAGGTTTGGCCGGAAGTTCTGCCTTTGGTACCATCCTCATCAA  
 TGCTATCTCTGGGCTCTCATGGCGATTCTCCCAACTATGCCTGGATGTTGGTGTTCGTTTTCTCCAG  
 GGACTGGTCAGCAAAGCAGGCTGGTTAATTGGCTACATCCTGATTACAGAATTTGTTGGGCTGGGCTATC  
 GCAGAATGGTGGGATTTGCTATCAAATCGCCTTCACCCTTGGCCTCCTGATCCTGGCTGGAGTGGCCTA  
 TGTGATCCCAACTGGAGATGGCTACAATTTGCTGTGACTCTGCCCAACTTCTGCTTCTGCTCTATTTT  
 TGGTGCATACCGAATCTCCAAGATGGCTGATCTCCAGAACAAAATCGTAAAAGCCATGAAGATAATTA  
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 TGGCAAGAAATGAAACCTCACTCTGGACTTGGTGCAGAACCCCTCAGATAAGGAAACACACGTTGATC  
 TTGATGTACAATTGGTTCACGAGCTCTGTTCTCTACCAGGGCCTCATCATGCACATGGCCTTGCAGGG  
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 TCTGTTTTTATCCCTGATGATCTACAGTGGCTGAAAATACCATTGCATGCTTGGGTAGAATGGGATCA  
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 CCTTGTCTGCTCCTCCATGTGTGACATTGGCGGCATCATCACGCTTTCCTCGTCTACCCTCAGCGAC  
 ATCTGGATGGAGTTCCCACTGGTGTATTTGCTGTGGTGGCCTGTGCTGGGGCACTTGTGCTGTTGC  
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 ATCATTGTGCTGGAGCTGACTTTGCTCTCTGAGGCCAGAGATGGAGCTTCTCTCCCTCCCCCA  
 AACCCACACAAACCAACCTCACTTACCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR212184 representing NM\_031584  
 Red=Cloning site Green=Tags(s)

MSTVDDILEHIGEFHLFQKQTFLLALLSGAFTPIYVGI VFLGF TPDHHCWSPGAAKLSQRGWSQAEEL  
 NYTVPGLGPSDEASFLSQCMRYEVDWNQSTLDCVDPLSSLAADRNQLPLGPCEHGWWYNTPGSSIVTEFN  
 LVCAHSWMLDLFQSVVNVGFFIGAMMIGYLADRFGRKFCLLVITILINAI SGALMAISPNYAWMLVFRFLQ  
 GLVSKAGWLI GYILITEFVGLGYRRMVGICYQIAFTVGLLILAGVAYVIPNWRWLQFAVTLPNFCFLLYF  
 WCIPESPRWLISQNKIVKAMKIIKHI AKKNGKSVPVSLQNLTPDEDAGKCLKPSILD LVRTPQIRKHTLI  
 LMYNWF TSSVLYQGLIMHMGLAGDNIYLDFFYSALVEFPAAFI IILTIDRVGRRYPWAVSNMVAGAACLA  
 SVFIPDDLQWLKITIACLGRMGITMAYEMVCLVNAELYPTYIRNLGVLVCSMCDIGGIITPFLVYRLTD  
 IWMEFPLVVFVAVGLVAGALVLLL PETKGKALPETIEDAENMQRPKRK KERKENLPPSQASRPSAKLKRKG  
 IIAAGADFALSEARDGASLSPPPKPTQNTLYP

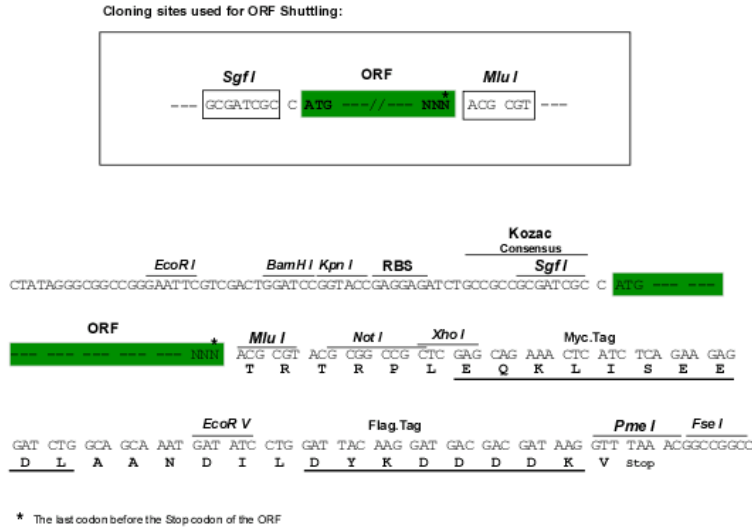
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja2357\\_a09.zip](https://cdn.origene.com/chromatograms/ja2357_a09.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_031584

ORF Size: 1779 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.

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\\_031584.2](#), [NP\\_113772.1](#)

**RefSeq Size:** 2152 bp

**RefSeq ORF:** 1782 bp

**Locus ID:** 29503

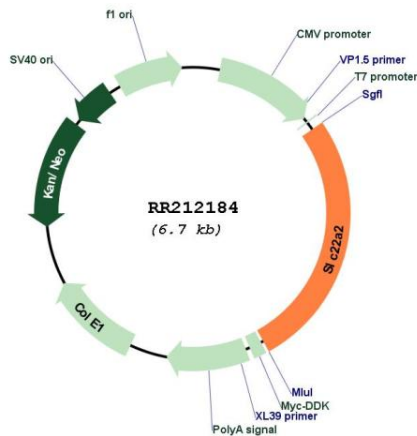
**UniProt ID:** [Q9R0W2](#)

**Cytogenetics:** 1q11

**MW:** 66.5 kDa

**Gene Summary:** acts as a transporter for organic cations and non-neuronal monoamines; may play a role in organic cation/H<sup>+</sup> antiport function in renal brush border membrane vesicles [RGD, Feb 2006]

**Product images:**



Circular map for RR212184