

## Product datasheet for **RC218172**

### SLC22A3 (NM\_021977) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC22A3 (NM_021977) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC22A3
Synonyms:	EMT; EMTH; OCT3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-Myc-DDK (PS100007)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC218172 representing NM\_021977  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCCTCCTTCGACGAGGCGCTGCAGCGGGTGGCGGAGTTCGGGCGCTCCAGAGGCGCGTGTTCCTTGC  
 TGCTGTGCTGACGGGCGTCACCTTCGCTTCTCTTCGTCGGCGTGGTCTTCTGGGCACGCAGCCCGA  
 CCACTACTGGTGCCGCGGCCAAGTGCCGCGGCGCTGGCCGAGCGCTGCGGCTGGAGCCCGAGGAGGAG  
 TGGAAACGCACGGCGCCCGCTCCCGCGGCCAGAGCCCCGAGCGCCGCGGCCGCTGCCAGCGTACC  
 TCCTGGAGGCGGCCAACGACAGCGCTCCGCCACTAGCGCTCTCAGTGCAGCGGACCCACTCGCCGCTT  
 CCCCACCGTTTCGGCTCCCTTGTGCCGTGCCGCGGCGCTGGCGCTACGCCAGGCCACTCCACCATC  
 GTCAGCGAGTTTACCTTGTCTGTGTAATGCGTGGATGCTGGACCTACCCAAGCCATCTGAACCTCG  
 GCTTCTGACTGGAGCATTACCTTAGGCTATGCAGCAGACAGGTATGGCAGGATCGTCATTTACTTGCT  
 ATCCTGCCTTGGTGTGGCGTCACTGGGTTGTGGTGGCCTTTCACCAAATTCCTGTGTTTGTGATC  
 TTCGCTTCTGCAAGGTGATTTGGAAAAGGGGACGTGGATGACTTGCTACGTGATTGTGACAGAAATAG  
 TAGGTTTCAAACAAGGAGGATTGTGGGAATCGTGATTCAAATGTTCTTTACCCTTGAATCATAATTCT  
 CCCTGGAATTGCCTACTTCATCCCAACTGGCAAGGAATCCAGTTAGCCATCACGCTGCCAGCTTTCTC  
 TTCCTCCTTTATTAAGGTTGGTCCCTGAGTCTCCCGTTGGCTGATTACTCGGAAGAAAGGAGATAAAG  
 CATTACAGATCCTGAGACGATTGCTAAGTGAATGGGAAATACCTCTCATCAAATTAAGGAGATCAC  
 TGTTACAGATGAGGAAGTTAGTAATCCATCCTTTTAGATCTGGTGAAGACTCCCCAAATGAGGAAATGC  
 ACATTTATTCTTATGTTTGGTTGGTTCACAAGCGCAGTGGTGTATCAAGGACTTGTATGCGCTGGAA  
 TTATAGGGGCAACCTCTATATAGACTTTTTCATCTCGGGCGTGGTGAAGTCCAGGAGCTCTCTTGAT  
 CTACTAACCTTGAAGCGCTTGGACGACGCTCCCTTTTCAGCAAGCAATATAGTGGCAGGGGTGGCA  
 TGCTTGTCACTGCGTCTTACCAGAAGGAATAGCATGGTTGAGGACCACAGTGGCTACATTGGGAAGAC  
 TAGGGATAACCATGGCCTTTGAAATTGTTATTTGGTAAATTCAGAATTGTACCCAACAACATTACGAAA  
 TTTTCGGAGTTTCGCTCTGTTTCAAGTCTGTGTGATTTTGGGGGAATCATAGCCCCATTTCTGCTCTTCG  
 CTAGCAGCGGTGGCTAGAACTACCTCTGATCATCTTTGGTATCCTGGCATCCATCTGTGGTGGCCTTG  
 TGATGCTTTTGCCTGAAACCAAGGGATTGCCTTGCAGAGACAGTGGATGATGTAGAAAAACTTGGCAG  
 TCCACATTCCTGTAATGTGGCAGGAATAAGAAAACCCAGTTTCCCGCTCTCACCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC218172 representing NM\_021977  
 Red=Cloning site Green=Tags(s)

MPSFDEALQRVGEFGRFQRRVFLLLCLTGVTF AFLFVGVVFLGTQPDHYWCRGPSAAALAERCGWSPEEE  
 WNRTAPASRGPEPPERGRRCQRYLLEAANDSASATSALSCADPLAAFPNRSAPLVPCRGGWRYAQAHSTI  
 VSEFDLVCVNAWMLDLTQAILNLGFLTGAFTLGYAADRYGRIVIIYLLSCLGVTGTVVAFAPNFPVFI  
 FRFLQGVFGKGTWMTCYVIVTEIVGSKQRRIVGIVIQMFFTLGIIILPGIAYFIPNWQGIQLAITLPSFL  
 FLLYYVWVPESPRWLITRKKGDKALQILRRIAKCNGKYLSSNYSEITVTDEEVSNSPFLDLVTRTPQMRKC  
 TLILMFAWFTSAVVYQGLVMRLGIIGNLYIDFFISGVVELPGALLILLTIERLRRLPFAASNIVAGVA  
 CLVTAFLPEGIAWLRTTVATLGRG GITMAFEIVYLVNSELYPTTLRNFGVSLCSGLCDFGGIAPFLLFR  
 LAAVWLELPLIIFGILASICGGLVMLLPETKGIALPETVDDVEKLGSPHSCKCGRNKKTPVSRSHL

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg4983\\_c05.zip](https://cdn.origene.com/chromatograms/mg4983_c05.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_021977

ORF Size: 1668 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\\_021977.4](#)

RefSeq Size: 5624 bp

RefSeq ORF: 1671 bp

Locus ID: 6581

UniProt ID: [O75751](#)

Cytogenetics: 6q25.3

Domains: sugar\_tr

Protein Families: Transmembrane

MW: 61.1 kDa

**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. [provided by RefSeq, Jul 2008]