

## Product datasheet for **RG218172**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC22A3 (NM_021977) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC22A3
Synonyms:	EMT; EMTH; OCT3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG218172 representing NM\_021977  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCCTCCTTCGACGAGGCGCTGCAGCGGGTGGCGGAGTTCGGGCGCTCCAGAGGCGCGTGTTTTTGC  
 TGCTGTGCTGACGGGCGTCACCTTCGCTTCTCTTCGTCGGCGTGGTCTTCTGGGCACGCAGCCCGA  
 CCACTACTGGTGCCGCGGCCAAGTGCCGCGGCGCTGGCCGAGCGCTGCGGCTGGAGCCCGAGGAGGAG  
 TGGAAACGCACGGCGCCCGCTCCCGCGGCCAGAGCCCCCGAGCGCCGCGGCCGCTGCCAGCGTACC  
 TCCTGGAGGCGGCCAACGACAGCGCTCCGCCACTAGCGCTCTCAGTGCAGCGGACCCACTCGCCGCTT  
 CCCCACCGTTTCGGCTCCCTTGTGCCGTGCCGCGGCGCTGGCGCTACGCCAGGCCACTCCACCATC  
 GTCAGCGAGTTTACCTTGTCTGTGTAATGCGTGGATGCTGGACCTACCCAAGCCATCCTGAACCTCG  
 GCTTCTGACTGGAGCATTACCTTAGGCTATGCAGCAGACAGGTATGGCAGGATCGTCATTTACTTGCT  
 ATCCTGCCTTGGTGTGGCGTCACTGGGTTGTGGTGGCCTTTCACCAAATTCCTGTGTTTGTGATC  
 TTCCGCTTCTGCAAGGTGATTTGGAAAAGGGGACGTGGATGACTTGCTACGTGATTGTGACAGAAATAG  
 TAGGTTTCAAACAAGGAGGATTGTGGGAATCGTGATTCAAATGTTCTTTACCCTTGAATCATAATTCT  
 CCCTGGAATTGCCTACTTCATCCCAACTGGCAAGGAATCCAGTTAGCCATCACGCTGCCAGCTTTCTC  
 TTCTCTTTTACTGGGTGGTCCCTGAGTCTCCCGTTGGCTGATTACTCGGAAGAAAGGAGATAAAG  
 CATTACAGATCCTGAGACGATTGCTAAGTGAATGGGAAATACCTCTCATCAAATTACTCAGAGATCAC  
 TGTTACAGATGAGGAAGTTAGTAATCCATCCTTTTAGATCTGGTGAAGACTCCCCAAATGAGGAAATGC  
 ACATTATTCTTATGTTTGGTGGTTCACAAGCGCAGTGGTGTATCAAGGACTTGTATGCGCCTGGAA  
 TTATAGGGGGCAACCTCTATATAGACTTTTTTCATCTCGGCGTGGTGGAACTGCCAGGAGCTCTTTGAT  
 CTACTAACCATGAGCGCTTGGACGACGCTCCCTTTGCGGCAAGCAATATAGTGGCAGGGGTGGCA  
 TGCTTGTCACTGCGTCTTACCAGAAGGAATAGCATGGTTGAGGACCACAGTGGCTACATTGGGAAGAC  
 TAGGGATAACCATGGCCTTTGAAATTGTTATTTGGTAAATTCAGAATTGTACCCAACAACATTACGAAA  
 TTTGCGAGTTTCGCTCTGTTTCAAGTCTGTGATTTTGGGGGAATCATAGCCCCATTTCTGCTTTTCGG  
 CTAGCAGCGGTGGCTAGAACTACCTCTGATCATCTTTGGTATCCTGGCATCCATCTGTGGTGGCCTTG  
 TGATGCTTTTGCCTGAAACCAAGGGATTGCCTTGGCAGAGACAGTGGATGATGTAGAAAAACTTGGCAG  
 TCCACATTCTGTAATGTGGCAGGAATAAGAAAACCCAGTTTCCCGCTCTCACCTT

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG218172 representing NM\_021977  
 Red=Cloning site Green=Tags(s)

MPSFDEALQRVGEFGRFQRRVFLLLCLTGVTF AFLFVGVVFLGTQPDHYWCRGPSAAALAEKRGWSPEEE  
 WNRTAPASRGPEPPERRGRCQRYLLEAANDSASATSALSCADPLAAFPNRSAPLVPCRGGWRYAQHSTI  
 VSEFDLVCVNAWMLDLTQAILNLGFLTGAFTLGAAADRYGRIVIYLLSCLGVGTGVVAFAPNFPVFI  
 FRFLQGVFGKGTWMTCYIVTEIVGSKQRRIVGIVIQMFFTLGIIILPGIAYFIPNWQGIQLAITLPSFL  
 FLLYYVWPESPRWLITRKKGDKALQILRRIKCNKYLSSNYSEITVTDEEVSNSPFLDLVTRTPQMRKC  
 TLILMFAWFTSAVVYQGLVMRLGIIGNLYIDFFISGVVELPGALLILLTIERLRRLPFAASNIVAGVA  
 CLVTAFLPEGIAWLRRTTVALGRLGITMAFEIVLVNSELYPTTLRNFGVSLCSGLCDFGGIAPFLFR  
 LAAVWLELPLIIFGILASICGGLVMLLPETKGIAPETVDDVEKLGSPHSCKCGRNKKTPVSRSHL

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI



<b>ACCN:</b>	NM_021977
<b>ORF Size:</b>	1668 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_021977.2</a> , <a href="#">NP_068812.1</a>
<b>RefSeq Size:</b>	5624 bp
<b>RefSeq ORF:</b>	1671 bp
<b>Locus ID:</b>	6581
<b>UniProt ID:</b>	<a href="#">O75751</a>
<b>Cytogenetics:</b>	6q25.3
<b>Domains:</b>	sugar_tr
<b>Protein Families:</b>	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. [provided by RefSeq, Jul 2008]