

## Product datasheet for **MG208770**

### Slc22a2 (NM\_013667) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Slc22a2 (NM_013667) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Slc22a2
Synonyms:	Oct2; Orct2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG208770 representing NM\_013667  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCCGACCGTGGATGATATTCTAGAACATATAGGGGAATTCACCTTTCCAGAAACAAACATTTTCC  
 TCTTAGCTCTGCTCTCCGGTGCCTTACCCCCATCTATGTGGGCATCGTTTTCTGGGCTTCACCCCAA  
 CCACCACTGCCGGAGTCCTGGAGTGGCCGAGCTGAGCCAGCGGTGTGGCTGGAGCCAGCAGAGGAGCTG  
 AACTACACCGTGCCGGGCTGGGGTCTGCGGGTGGAGTCTCCTTCTCAGCCAGTGCATGAGGTATGAGG  
 TGGACTGGAACAGAGCACCCCTTACTGTGTGGACCCACTGTCCAGCCTGGCTGCCAACAGGAGCCACTT  
 GCCACTGAGCCCCCTGCGAGCATGGCTGGGTGTACGACACTCCCGCTCCTCCATCGTCACTGAGTTAAC  
 CTAGTGTGTGCTCACTCCTGGATGCTGGACCTGTTTCAGTCATTAGTGACGTGGGGTTTTTCATCGGTG  
 CTGTGGGCATTGGTTACCTAGCAGACAGGTTTGGCGGAAAGTTCTGCCTTTGGTACCATCCTCATCAA  
 TGCTATCTCTGGGTTTCATGGCGATTCACCCAATATGCCTGGATGTTGGTGTTCGATTTCTACAG  
 GGACTGGTCAGCAAAGCGGGCTGGTTAATTGGCTATATCCTGATTACAGAATTTGTTGGGCTGGGCTATC  
 GCAGAACAGTAGGGATTTGTTACCAAATCGCCTTACTGTTGGGCTCCTGATCCTGGCTGGAGTGGCCTA  
 TGCCCTTCCCACTGGAGGTGGCTGCAATTTGCCGTGACTCTGCCCAACTTCTGCTTCTGCTCTATTTT  
 TGGTGCATACCGAGTCTCCAAGATGGTTGATCTCCAGAAACAAAATGCAAAAGCCATGAAAATCATT  
 AGCATATTGCTAAGAAAATGAAAAATCGGTGCCAGTCTCTCTTCAGAGCCTGACGGCAGATGAGGATAC  
 TGGCATGAAATGAACCTTCGTTCTGGACTTGGTGCAGAACCCCTCAGATAAGGAAACATACGTTGATC  
 TTGATGTACAATTGGTTCACGAGCTCTGTTCTCTACCAGGGCCTCATCATGCACATGGCCCTCGCAGGGG  
 ACAACTCTACTTGGATTTCTTCTACTCTGCCCTGGTGGAAATCCAGCTGCCTCATCATCATCTACCTAC  
 CATAGACCGGATTGGTCCGCTATCCCTGGGCTGTGTCAAATATGGTGGCAGGACAGCCTGCTAGCT  
 TCGGTTTTTATCCCTGATGATCTACAGTGGCTGAAAATTACCGTGGCGTCTGGGTAGAATGGGCATCA  
 CCATAGCCTACGAAATGGTCTGCCTGGTCAACGCTGAGCTGTACCCACATACATCAGGAATCTTGTCTG  
 CCTTGTCTGCTCCTATGTGTGACATTGGTGGCATCGTCACACCTTTCCTGGTCTACCCTCACTGAC  
 ATCTGGCTGGAGTCCCGCTGGTCTGATTTGCTGTGGTGGCCTTGTGTGGGGACTTGTGCTATTGC  
 TACCTGAGACAAAGGGAAGGCTCTGCCTGAGACCATCGAGGATGCTGAGAAGATGCAGAGGCCAAGAAA  
 AAAGAAAAGAAAAGAGAATTTACCTCCAAGTTAAGAAAGCAGAATAAGC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG208770 representing NM\_013667  
 Red=Cloning site Green=Tags(s)

MPTVDDILEHIGEFHLFQKQTFLLALLSGAFTPIYVGIVFLGFTPNHHRSPGVAELSQRCGWSPAEEEL  
 NYTVPLGSGAGEVSFSLSQMRYEVDWNQSTLDCVDPLSSLAAANRSHLPLSPCEHGWWYDTPGSSIVTEFN  
 LVCAHSWMLDLFQSLVNVGFFIGAVGIGYLADRFGRKFLLVTLILINAIISGVLMAISPNYAWMLVFRFLQ  
 GLVSKAGWLIYILITEFVGLGYRRTVGICYQIAFTVGLLILAGVAYALPNRWLQFAVTLPNFCFLLYF  
 WCIPESRWLISQNKAKAMKIIKHIKNGKSVPSLQSLTADEDTGMKLNPSFLDLVTRTPQIRKHTLI  
 LMYNWFSSVLYQGLIMHMGLAGDNIYLDFFYSALVEFPAAFIIILTIDRIGRRYPWAVSNMVAGAACLA  
 SVFIPDDLQWLKITVAACLGRMGITIAEMVCLVNAELYPTYIRNLAVLVCSSMCDIGGIVTPFLVYRLTD  
 IWLEFPLVVFVAVVGLVAGGLVLLLPEKTKALPETIEDAEKMQRPKPKKEKRIYLQVYKKAELS

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

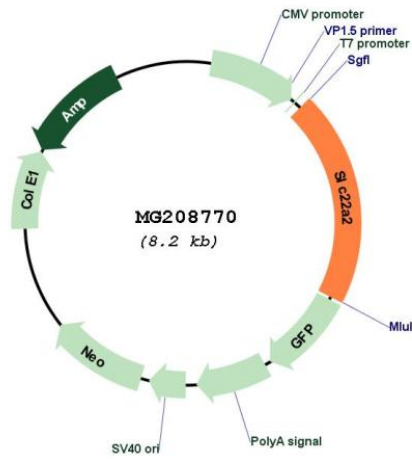
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



<b>ACCN:</b>	NM_013667
<b>ORF Size:</b>	1659 bp
<b>OTI Disclaimer:</b>	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>
<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_013667.2</a> , <a href="#">NP_038695.1</a>
<b>RefSeq Size:</b>	2138 bp
<b>RefSeq ORF:</b>	1662 bp
<b>Locus ID:</b>	20518
<b>UniProt ID:</b>	<a href="#">O70577</a>
<b>Cytogenetics:</b>	17 8.61 cM
<b>Gene Summary:</b>	Mediates tubular uptake of organic compounds from circulation. Mediates the influx of agmatine, dopamine, noradrenaline (norepinephrine), serotonin, choline, famotidine, ranitidine, histamine, creatinine, amantadine, memantine, acriflavine, 4-[4-(dimethylamino)-styryl]-N-methylpyridinium ASP, amiloride, metformin, N-1-methylnicotinamide (NMN), tetraethylammonium (TEA), 1-methyl-4-phenylpyridinium (MPP), cimetidine, cisplatin and oxaliplatin. Cisplatin may develop a nephrotoxic action. Transport of creatinine is inhibited by fluoroquinolones such as DX-619 and LVFX. This transporter is a major determinant of the anticancer activity of oxaliplatin and may contribute to antitumor specificity (By similarity). [UniProtKB/Swiss-Prot Function]