

## Product datasheet for **MG208665**

### **Slc1a3 (NM\_148938) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Slc1a3 (NM_148938) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Slc1a3
Synonyms:	AI504299; B430115D02Rik; Eaat1; GLAST; GLAST-1; GLU-T; GluT-1; Gmt1; MGluT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG208665 representing NM\_148938  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACCAAAAGCAACGGAGAAGAGCCTAGGATGGGGGCAGGATGGAGAGATTGCAGCAAGGGTCCGCA  
 AGCGGACACTTCTGGCCAAGAAGAAAGTTCAGAGCCTCACCAAGGAAGATGTTAAGAGTTACCTGTTTCG  
 GAATGCCTTCGTTCTGCTCACGGTCACTGCTGTCATTGTGGGTACAATCCTTGGATTGCGCTCCGACCG  
 TATAAAATGAGCTACCGGAGGTGAAGTACTTTTCGTTCCCTGGGGAGCTTCTCATGAGGATGCTGCAGA  
 TGCTGGTCTTGCCCTGATCATCTCCAGTCTCGTACAGGAATGGCGGCCCTAGATAGTAAGGCATCCGG  
 GAAGATGGGGATGCGCGCTGTAGTCTATTACATGACTACTACCATCATTGCTGTGGTGATTGGCATAATC  
 ATTGTCATCATCATCCACCCCGAAAGGGCACAAAGGAAAACATGTACAGAGAAGGTAATAATCGTGCAGG  
 TCACTGCAGCAGATGCCTTCTGGATTTGATCAGGAACATGTTCCCTCCCAATCTGGTAGAAGCCTGCTT  
 TAAACAGTTTAAAACAGCTACGAGAAAAGAAGCTTTAAAGTGCCTATCCAGTCCAACGAAACACTTCTG  
 GCGCCGTGATCAACAACGTGTCAGAGGCCATGGAGACTCTGACCCGGATCCGGGAGGAGATGGTGCCCG  
 TGCTGGATCTGTGAATGGGGTCAATGCCTGGGCCTAGTTGTCTTCTCCATGTGCTTCGGTTTCGTGAT  
 CGGAAACATGAAGGAGCAGGGGCAAGCGCTGAGAGAGTCTTTGATTCTCTTAACGAAGCCATCATGCGA  
 TTGGTCGCGGTGATAATGTGGTATGCGCCTCTGGGCATCCTCTTCTTGTGTCGAGGGAAGATTGTTGAGA  
 TGGAAACATGGGTGTGATTGGGGGACAGCTTGCCATGTACACCGTGACAGTCAATGTGCGCCTCCTCAT  
 TCACGCCGTATCGTCTGCCTCTCTACTTCTGTAACCCGGAAGAACCCCTGGGTTTTATTGGA  
 GGGTGTCTGAAGCGCTCATCACAGCCTTGGGACCTCCTCAAGTCTGCCACCCATCCCATCACTTTCA  
 AGTGCCTGGAAGAGAACAATGGTGTGGACAAACGCATCACCAGATTTGTGCTCCCGTGGGGGCCACCAT  
 TAACATGGATGGGACCGCCTCTACGAGGCTTTGGCTGCCATTTTCATCGCTCAAGTGAACAACCTTGAC  
 CTGAACCTTTGGACAGATTATAACAATAAGCATCACAGCCACGGCCGAAGCATCGGGGACCGGGGATTC  
 CTCAGGCCGCTGCTGGTACCATGGTTCATCGTGTGACTCTGTGGGCTGCCACAGATGACATCACACT  
 CATCATTGCAGTGGACTGGTTTCTGGACCCCTCCGAACCACCACCAACGTAAGGGTACTCCCTCGGA  
 GCAGGGATTGTCGAGCACTTGTCCCGACATGAAGTGAAGAACCGAGATGTTGAAATGGGGAACCGGTGA  
 TTGAGGAGAACGAAATGAAGAAGCCGTATCAGCTGATTGCCAGGACAATGAACCGGAGAAACCCGTGCC  
 AGACAGCGAAACCAAGATG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>MG208665 representing NM\_148938  
 Red=Cloning site Green=Tags(s)

MTKSNGEPRMGGRMERLQQGVRKRTLAKKKVQSLTKEDVKSYLFRNAFVLLTAVIVGTILGFALRP  
 YKMSYREVKYFSFPGELLMRMLQMLVPLIISSLVTGMAALDSKASGKMGMRVAVVYMTTIIAVVIGII  
 IVIIHPGKGTKENMYREGKIVQVTAADAFDLIRNMFPPNLVEACFKQFKTSYEKRSFKVPIQSNETLL  
 GAVINNVSEAMETLRIREEMVVPVGSVNGVNLGLVVFVSMCFGFVIGNMKEQQQALREFFDLNEAIMR  
 LVAVIMWYAPLGLFLIAGKIVEMEDMGVIGGQLAMYTVTVIVGLLIHAVIVLPLLYFLVTRKNPWVFIG  
 GLLQALITALGTSSSSATLPITFKLEENNGVDKRITRFVLPVGATINMDGTALYEALAAIFIAQVNNFD  
 LNFQIITISITATAASIGAAGIPQAGLVTMIVLTSVGLPTDDITLIIAVDWFLLDRLRTTNNVLGDSL  
 AGIVEHLRHELKNRDVEMGNSVIEENEMKKPYQLIAQDNEPEKPVADSETKM

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

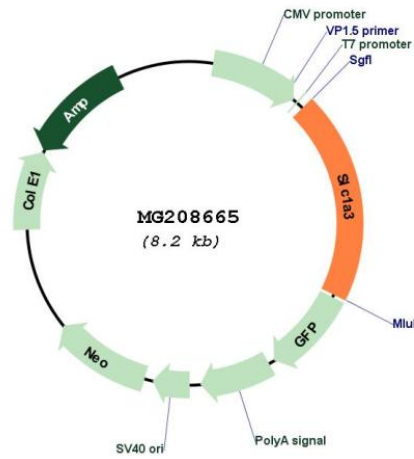
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



<b>ACCN:</b>	NM_148938
<b>ORF Size:</b>	4211 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_148938.3</a> , <a href="#">NP_683740.1</a>
<b>RefSeq Size:</b>	4147 bp
<b>RefSeq ORF:</b>	1632 bp
<b>Locus ID:</b>	20512
<b>UniProt ID:</b>	<a href="#">P56564</a>
<b>Cytogenetics:</b>	15 3.82 cM
<b>Gene Summary:</b>	<p>Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate (PubMed:7903437, PubMed:28032905). Functions as a symporter that transports one amino acid molecule together with two or three Na(+) ions and one proton, in parallel with the counter-transport of one K(+) ion (By similarity). Plays a redundant role in the rapid removal of released glutamate from the synaptic cleft, which is essential for terminating the postsynaptic action of glutamate (PubMed:15363892, PubMed:15390100, PubMed:16880397). [UniProtKB/Swiss-Prot Function]</p>