

Product datasheet for **MG208711**

Slc38a4 (NM_027052) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc38a4 (NM_027052) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Slc38a4
Synonyms:	1110012E16Rik; 1700012A18Rik; Ata3; mATA3; mNAT3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG208711 representing NM_027052
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**C

ATGGACCCCATGGAACGAACAACGTGAGCATCGAACCCGACGGAGACAGCTGCAGCGGGGACAGTATTC
 AGGACAGCTACACCGGCATGGAAGAACTCCGACAAGGACGCCATGAACAGCCAATTTGCTAATGAAGATGC
 CGAAAGTCAGAAGTTCCTGACAAATGGGTTTTAGGGAAGAAGAAGCTAGCCGATTACGCGGATGAGCAT
 CACCCTGGAATGACTTCCTTTGGAATGTCCTCATTTAACCTGAGCAACGCCATCATGGGCAGTGGGATCT
 TAGGCTTGTCTATGCCATGGCCAACACCGGGATCATCTTTTATAATCATGCTGCTTACTGTGGAAT
 ACTCTCGTCTACTCGGTCACCTTTTGTGAAGACAGCCAAGGAAGGAGGTCTCTAATCTATGAAAAA
 TTGGGCGAGAAAGCATTGGATGGCCTGGGAAATTTGAGCCTTCATCTCTATTACAATGCAGAACATTG
 GAGCCATGTCAAGCTACCTCTTCATCATTAAAGTACGAAGTGCCTGAAGTAATCAGAGCATTATGGGACT
 TGAAGAAAACACTGGGGAATGGTACCTCAACGGCAACTACCTCGTCTTATTTGTGTCGCTGGGGATCATC
 CTCCCGCTCTCTCTCTTAAAAATTTAGGCTACCTTGGCTACACCAAGTGGATTTCTCTCTCTGCTGATGG
 TGTTTTCTGTCAGTGTGGTGATTACAAAAATTTCCAAATTCCTGCCCCTCTGCCTGCTCTGGATACAA
 CAACGGAATCTGACGTTCAACAACACACTTCCGATTCACATGATCTCGTGCCTAATGACTCGGAGAGC
 TCGGGTGTGAACCTCATGATGGATTACGCTCACCACAACCCAGCTGGGCTGGATGAGAAGCAGGTGCGAG
 GCCCTCTTACAGCAATGGCGTGGAGTACGAAGCCAGGGTGTGAGAAATGCCAACCAAAATACCTTGT
 GTTCAATCCCGGACGGCCTATGCAATCCCAATCCTGGCTTTTGTCTTGTCTGCCACCTGAGGTCTT
 CCCATCTACAGCGAGCTTAAAGATCGATCCCGCAGAAAGATGCAGACGGTGTCCAACATTTCCATCTCAG
 GCATGCTCGTCATGTACCTTCTTGGGCCCTCTTTGGTTATCTGAGCTTCTACGGGGACGTTGAAGACGA
 GCTGCTGCATGCTTACAGCAAGGTCTACACATTTGATACGGCTCTTCTCATGGTGCCTGGCAGTCCCTG
 GTGGCAGTGACACTGACCGTGCCCATCGTGTGTTCCCGATCCGTAATTCGGTGATCACACTGCTGTTTC
 CAAGGAAACCTTCAGCTGGCTGAAGCATTTCCGGATCGCTGCAATCATCATCGCACTCAACAACATCCT
 GGTATCCTCGTGCCTACCATCAAATACATCTTTGGATTATAGGGGCTTCTTCTGCCACTATGCTGATT
 TTCATTCTCCGGCTGCGTTTTATCTCAAGCTCGTCAAGAAAGAACCCTAAGATCACCCAGAAGATTG
 GGGCTTTGGTCTTCTTGTGACTGGAATTATTTTCATGATGGGAAGCATGGCGCTCATTATACTCGACTG
 GATCTACAACCCGCCGAATCCCAATCACCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG208711 representing NM_027052
 Red=Cloning site Green=Tags(s)

MDPMELNNVSIIEPDGDSGDSIQDSYTGMEKSDKAMNSQFANEDAESQKFLTNGFLGKKKLADYADEH
 HPGMTSFGMSSFNLNAIMGSGILGLSYAMANTGIILFIIMLLTVAILSLYSVHLLKTAKEGGLIYK
 LGEKAFGWPGKIGAFISITMQNIGAMSSYLFIKYELPEVIRAFMGLEENTGEWYLNNGYLVLFVSVGII
 LPLSLLKNLGYLGYTSGFSLSCMVFFVSVVIYKFKQIPCLPALDHNNGLTFNNTLPIHMISLPNDS
 SGVNFMMDYAHNPAGLDEKQVAGPLHNGVEYEAQGAECQPKYVFNSRTAYAIPIAFVCHPEVL
 PIYSELKDRSRKMQTVSNISISGMLVMYLLAALFGYLSFYGDVEDELLHAYSKVYTFDALLMVR
 LAVL VAVTLTVPIVLFPIRTSVITLLFPRKPSWLKHFGIAAIIILNLLVILVPTIKYIFGFIGASSATMLI
 FILPAAFYKLKVKKEPLRSPQKIGALVFLVTGIIIFMMGSMALIILDWIIYNPPNPNHH

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_027052

ORF Size: 1641 bp

OTI Disclaimer: 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_027052.3](#), [NP_081328.2](#)

RefSeq Size: 3932 bp

RefSeq ORF: 1644 bp

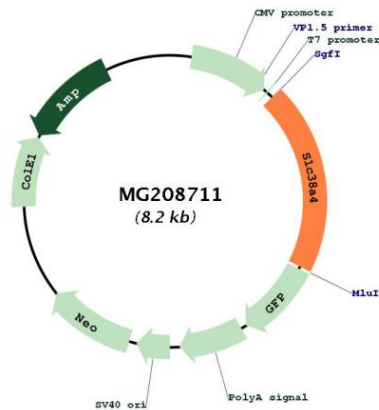
Locus ID: 69354

UniProt ID: [Q8R1S9](#)

Cytogenetics: 15 F1

Gene Summary: Sodium-dependent amino acid transporter. Mediates electrogenic symport of neutral amino acids and sodium ions. Has a broad specificity, with a preference for Ala, followed by Ser, His, Gly, Cys, Asn, Thr, Pro, Gln and Met. May mediate sodium-independent transport of cationic amino acids, such as Arg and Lys. Amino acid uptake is pH-dependent, with lower transport activities at pH 6.5, intermediate at pH 7.0 and highest between pH 7.5 and 8.5. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG208711