

Product datasheet for **MR208117**

Slc38a2 (NM_175121) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc38a2 (NM_175121) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc38a2
Synonyms:	5033402L14Rik; AI316867; ATA2; mKIAA1382; SAT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR208117 representing NM_175121
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGAAGACCGAAATGGGAAGGTTCAACATCTCCCGGATGAGGACAGCAGCAGTTACAGCTCCAACA
 GTGACTTCAACTACTCATACCCACCAAGCAGGCTGCTCTGAAAAGCCATTATGCCGACGTGGATCCCGA
 AAACCAGAACTTTTACTTGAATCAAATTTGGGGAAGAAGAAGTACGAAACAGACTTTTATCCAGGTA
 ACTTCCTTTGGAATGTCAGTATTTAATCTGAGCAATGCGATTGTGGGCAGTGAATCCTTGGGCTTTCTT
 ATGCCATGGCTAATACTGGAATTGCTCTTTTATAATTCTTGTACGTTCTGTCAATTTTTTCTGCTATA
 CTCCGTCCATCTCCTCTCAAGACTGCCAACGAAGGAGGATCTTATTGTACGAACAGTTGGGACATAAG
 GCGTATGGTCTGGCTGGAAAGCTAGCAGCCTCCGGATCGATAACCATGCAGAACATTGGGGCTATGTCAA
 GCTACCTCTTCATAGTAAATATGAGTTACCTTTGGTGATCAAGGCATTAATGAACATTGAAGATACAAA
 TGGGTTGGTATCTGAACGGTACTATCTGGTCTTCTGGTGTCCCTTGTCTCATTCTTCCATTGTCA
 CTGCTGAGAAATCTAGGATACTTGGGGTACACGAGCGGCTCTCTCTGCTCTGTATGATATTTTCTCTGA
 TCGTGGTGATTTGCAAGAAGTTTCAGATCCCTTGCCCGTGAAGCTGCTTTGGTGGCCAACGAACTGT
 GAACGGCACCTTTACCCAGGCAGCGTTGGCGTTGGCATTCAATAGCACCGCAGACGATGCTTGCAGGCCA
 CGCTATTTTCATCTTCAACTCGCAGACTGTGTATGCAGTACCCATCCTGACGTTTTCTTTGTCTGCCATC
 CCGCTGTTCTTCCCATCTACGAAGAGCTAAAGAGCCGACGCCGAGACGGATGATGAACGTGTCCAAGAT
 TTCCTTCTTCCCATGTTTCTGATGTACTTGTCTGCTCTCTTTGGTACCTGACCTTTTACGGACAC
 GTGGAATCGGAATTGCTGCATACCTACTCCGAGATCGTGGGACTGACATTCTTCTCCTTGTGTCCGAT
 TGGCTGTGCTGGTGGCTGTCACCTCACGGTCCAGTAGTTATTTCCCTATCCGAGTTCGCTCACTCA
 CTTACTGTGTCCCAAAAAGAGTTTCAGCTGGCTCCGGCACAGCATCATACCGTGACCATCTTGTCTTTC
 ACCAATTTGCTCGTCATCTTTGTCCCACTATTAGGGACATCTTCGGGTTTATTGGGGCGTGGGGCGCTG
 CCATGCTGATCTTTATCCTCCCGTCTGCCTTCTACATCAAGTTAGTGAAGAAGGAACCAATGAGATCCGT
 GCAAAAGATTGGGGCTCTGTGTTTTCTCCTGAGTGGCATAGTGGTGATGATTGGAAGCATGGGCTTGATT
 GTGCTGGATTGGGTCCACGATGCCTCCGCTGCAGGTGGGCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208117 representing NM_175121
 Red=Cloning site Green=Tags(s)

MKKTEMGRFNISPDESSSYSSNSDFNYSYPTKQAALKSHYADVPENQNFLLLESNLGKKKYETDFHPGT
 TSFGMSVFNLSNAIVGSGILGLSYAMANTGIALFIILLTFVSIFSLYSVHLLKLTANEGGSLLYEQLGHK
 AYGLAGKLAASGSITMQNIGAMSSYLFIVKYELPLVIKALMNIEDTNGLWYLNQDYLVLVSLVLILPLS
 LLRNLGYLGYTSGLSLLCMIFFLIVVICKKFQIPCPVEAALVANETVNGFTQAALALAFNSTADDACRP
 RYFIFNSQTVYAVPILTFSFVCHPAVLPIYEELKSRRRMMNVSKISFFAMFLMYLLAALFGYLTIFYGH
 VESELLHTYSEIVGTDILLVVRVLAVLAVTLVTPVVIFPIRSSVTHLLCPTKEFSWLRHSIITVTILSF
 TNLLVIFVPTIRDIFGFIGASAAAMLIFILPSAFYIKLVKKEPMRSVQKIGALCFLLSGIVVMIGSMGLI
 VLDWVHDASAAGGH

TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

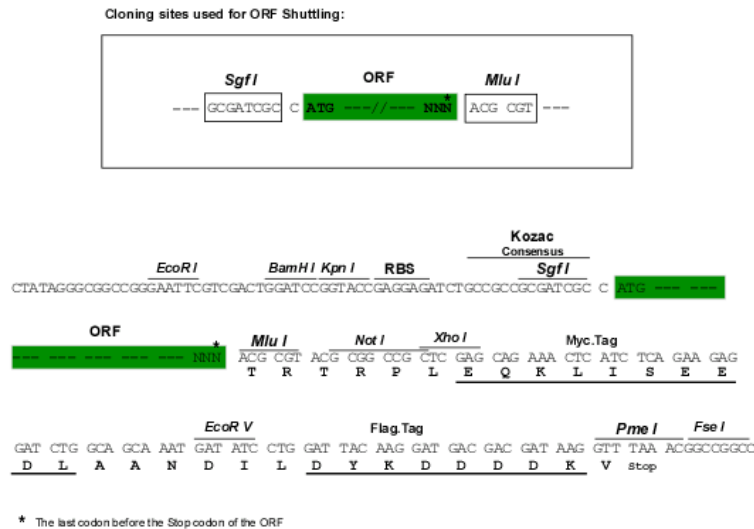
Chromatograms:

https://cdn.origene.com/chromatograms/mm9016_c06.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_175121

ORF Size: 1512 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 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.

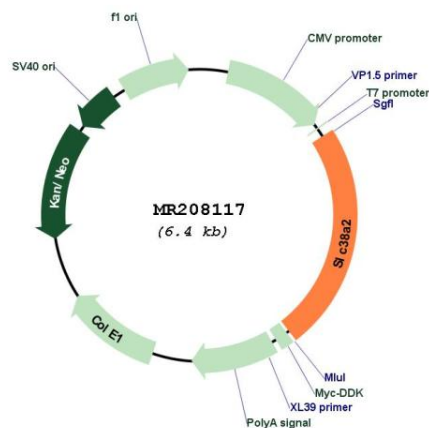
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_175121.4
RefSeq Size:	4645 bp
RefSeq ORF:	1515 bp
Locus ID:	67760
UniProt ID:	Q8CFE6
Cytogenetics:	15 F1
MW:	56 kDa
Gene Summary:	Functions as a sodium-dependent amino acid transporter. Mediates the saturable, pH-sensitive and electrogenic cotransport of neutral amino acids and sodium ions with a stoichiometry of 1:1. May function in the transport of amino acids at the blood-brain barrier and in the supply of maternal nutrients to the fetus through the placenta.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR208117