

Product datasheet for **MR208665**

Slc1a3 (NM_148938) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc1a3 (NM_148938) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc1a3
Synonyms:	AI504299; B430115D02Rik; Eaat1; GLAST; GLAST-1; GLU-T; GluT-1; Gmt1; MGLuT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR208665 representing NM_148938
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACCAAAAGCAACGGAGAAGAGCCTAGGATGGGGGCAGGATGGAGAGATTGCAGCAAGGGTCCGCA
 AGCGGACACTTCTGGCCAAGAAGAAAGTTCAAGCCTCACCAAGGAAGATGTTAAGATTACCTGTTTCG
 GAATGCCTTCGTTCTGCTCACGGTCACTGCTGTCATTGTGGGTACAATCCTTGGATTTCCTCCGACCG
 TATAAAATGAGCTACCGGAGGTGAAGTACTTTTCGTTCCCTGGGGAGCTTCTCATGAGGATGCTGCAGA
 TGCTGGTCTTGCCCTGATCATCTCCAGTCTCGTACAGGAATGGCGGCCCTAGATAGTAAGGCATCCGG
 GAAGATGGGGATGCGCGCTGTAGTCTATTACATGACTACTACCATCATTGCTGTGGTGATTGGCATAATC
 ATTGTCATCATCATCCACCCCGAAAGGGCACAAAGGAAAACATGTACAGAGAAGGTAAGTAAATCGTGCAGG
 TCACTGCAGCAGATGCCTTCTGGATTTGATCAGGAACATGTTCCCTCCCAATCTGGTAGAAGCCTGCTT
 TAAACAGTTTAAAACAGCTACGAGAAAAGAAGCTTTAAAGTGCCTATCCAGTCCAACGAAACACTTCTG
 GCGCCGTGATCAACAAGTGTACAGAGGCCATGGAGACTCTGACCCGGATCCGGGAGGAGATGGTGCCCG
 TGCTGGATCTGTGAATGGGGTCAATGCCTGGGCCTAGTTGTCTTCTCCATGTGCTTCGGTTTCGTGAT
 CGGAAACATGAAGGAGCAGGGGCAAGCGCTGAGAGAGTCTTTGATTCTCTTAACGAAGCCATCATGCGA
 TTGGTCGCGGTGATAATGTGGTATGCGCCTCTGGGCATCCTCTTCTTATCGCAGGAAGATTGTTGAGA
 TGGAAACATGGGTGTGATTGGGGGACAGCTTGCCATGTACCCGTGACAGTCAATGTGCGCCTCCTCAT
 TCACGCCGTATCGTCTGCCTCCTCTACTTCTGTAACCCGGAAGAACCCCTGGGTTTTATTGGA
 GGGTGTCTGAAGCGCTCATCACAGCCTTGGGACCTCCTCAAGTCTGCCACCTACCCATCACTTCA
 AGTGCCTGGAAGAGAACAATGGTGTGGACAAACGCATCACCAGATTTGTGCTCCCGTGGGGGCCACCAT
 TAACATGGATGGGACCGCCTCTACGAGGCTTTGGCTGCCATTTTCATCGCTCAAGTGAACAACCTTGAC
 CTGAACCTTTGACAGATTATAACAATAAGCATCACAGCCACGGCCGAAGCATCGGGGACCGGGGATTC
 CTCAGGCCGTCTGGTACCATGGTTCATCGTGTGACTCTGTGGCCTGCCACAGATGACATCACACT
 CATCATTGCAGTGGACTGGTTTCTGGACCGCCTCCGAACCACCACCAACGTAAGTGGTACTCCCTCGGA
 GCAGGGATTGTCGAGCACTTGTCCCGACATGAAGTGAAGAACCGAGATGTTGAAATGGGAACTCGGTGA
 TTGAGGAGAACGAAATGAAGAAGCCGTATCAGCTGATTGCCAGGACAATGAACCGGAGAAACCCGTGGC
 AGACAGCGAAACCAAGATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208665 representing NM_148938
 Red=Cloning site Green=Tags(s)

MTKSNGEPRMGRMERLQQGVRKRTLLAKKKVQSLTKEDVKSYLFRNAFVLLTVTAVIVGTILGFALRP
 YKMSYREVKYFSFPGELLMRMLQMLVPLIISSLVTGMAALDSKASGKMGMRVAVVYMTTIIAVVIGII
 IVIIHPGKGTENMYREGKIVQVTAADAFDLIRNMFPPNLVEACFKQFKTSYEKRSFKVPIQSNETLL
 GAVINNVSEAMETL TRIEEMVPVPGSVNGVNALGLVVF SMCFGFVIGNMKEQQQALREFFDSLNEAIMR
 LVAVIMWYAPLGILFLIAGKIVEMDMGVIGQLAMYTVTVIVGLLIHAVIVLPLLYFLVTRKNPWVFIG
 GLLQALITALGTSSSSATLPITFKLEENNGVDKRITRFVLPVGATINMDGTALYEALAAIFIAQVNNFD
 LNFQIITISITATAASIGAAGIPQAGLVTMVI VLT SVGLPTDDITLIIAVDWF LDRLRTTNNVLDGSLG
 AGIVEHL SRHELKRDVEMGNSVIEENEMKKPYQLIAQDNEPEKPVADSETKM

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9026_e08.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_148938

ORF Size: 1629 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).

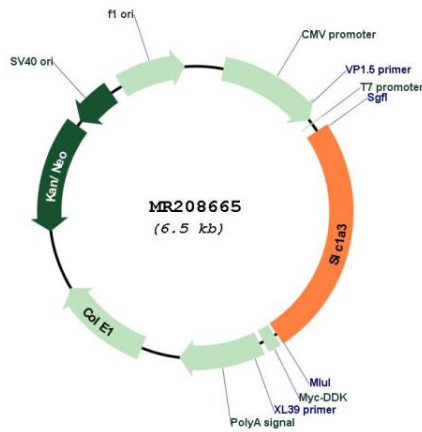
- Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid 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.

RefSeq: [NM_148938.3, NP_683740.1](#)

RefSeq Size: 4214 bp
 RefSeq ORF: 1632 bp
 Locus ID: 20512
 UniProt ID: [P56564](#)
 Cytogenetics: 15 3.82 cM
 MW: 60.1 kDa

Gene Summary: 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]

Product images:



Circular map for MR208665