

Product datasheet for **MG226166**

Slc1a2 (NM_001077514) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc1a2 (NM_001077514) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Slc1a2
Synonyms:	1700091C19Rik; 2900019G14Rik; AI159670; Eaat2; GLT-1; GLT1; MGLT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG226166 representing NM_001077514
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCATCAACAGAGGGTGCCAACAATATGCCAAGCAGGTAGAAGTGGCGATGCATGACAGCCACCTCA
 GCTCCGATGAGCCAAAGCACCGAAACCTGGGCATGCGCATGTGCGACAAGCTGGGGAAAAATCTCCTGCT
 CTCACTGACTGTGTTGGTGTATCCTGGGAGCAGTGTGTGGCGGCTGCTTCGCTTGGCATCGCCATC
 CACCCTGATGTGGTCATGTTGATAGCCTTCCCGGGGACATACTCATGAGGATGCTGAAGATGCTCATCC
 TCCCTCTTATCATCTCCAGTTTAAACACAGGGTGTGAGGCTGGATGCTAAAGCCAGCGGCCCGCTAGG
 CACGAGAGCTATGGTGTATTACATGTCCACGACCATTGCGCGCGTGTGGGGTTCATCTGGTGTG
 GCCATCCACCCAGGCAATCCAACTCAAGAAGCAGCTAGGGCCCGGAAGAAGAACGACGAGGTGTCTA
 GCCTGGATGCCTTCTGGATCTCATTAGAAATCTTCCCGGAGAACCTGGTGAAGCCTGTTCCAGCA
 GATTTCAGACAGTGACAAAGAAAGTTCTGGTGGCACCTCCATCTGAGGAGGCCAATACCACCAAGGCGGTC
 ATCTCCATGTTGAATGAAACCATGAACGAGGCCCTGAAGAACTAAGATCGTTATCAAGAAGGGCCTGG
 AGTTCAAGGACGGGATGAACGTCTTAGGTCTGATCGGATCTTTATTGCTTTCGGCATTGCCATGGGAA
 GATGGGTGAACAGGCCAAGCTGATGGTGGAGTTCTTCAACATTCTGAATGAGATCGTGATGAAGTTAGTG
 ATCATGATCATGTGGTACTCCCCCTGGGTATCGCCTGCTTGATTTGTGGGAAGATCATCGCCATCAAGG
 ACTTAGAAGTGGTTGCTAGGCAGCTGGGGATGTACATGATCACCGTATCGTGGGCTCATCATTACCG
 GGGCATCTTCTCCCCTTGATTTACTTTGTAGTGACCAGAAAAATCCATTCTCCTTTTTTGTGGCATA
 TTCCAAGCCTGGATCACTGCTCTGGAACTGCTCCAGTGTGGAACCTTGCCTGTTACCTCCGTTGCT
 TGAAGATAACTAGGGATTGACAAGCGTGTACCAGATTGCTCCTCCAGTCGGAGCAACCATTAACAT
 GGATGGCACAGCCCTTTACGAGGCTGTGGCAGCCATCTTCATAGCCCAAATGAATGGGGTCACTTGGAT
 GGAGGTACAGATTGTACTGTAAGCCTTACAGCCACCCTGGCGAGCATTGGTGCAGCCAGTATCCACGCG
 CCGGGCTGGTACCATGCTCCTCATTCTCACAGCTGTGGGCTGCCAACGGAGGATATCAGTCTGCTGGT
 GGCGGTGGACTGGCTGCTGGATAGAATGAGAACTTCAGTCAATGTGGTGGGCGATTCTTTTGGGCTGGG
 ATTGTCTATCACCTTTCCAAGTCTGAGCTGGACACCATTGACTCCCAACACCGAATGCAGGAAGACATCG
 AAATGACCAAGACGCAGTCCATTTACGACGACAAGAACCAGGGAAAGCAACTTAATCAGTGTGTCTA
 TGCCGCACACAACCTGTGCGTAATAGATGAGTGAAGGTAACCTCTGGCGGCCAATGGAAAGTCAGCTGAC
 TGCAGTGTGAGGAAGAACCTTGAAACGTGAAAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG226166 representing NM_001077514
 Red=Cloning site Green=Tags(s)

MASTEGANNMPKQVEVRMHDShLSSDEPKHRNLGMRMCDKLGNLILLTLVFGVILGAVCGGLLRASPI
 HPDVVMLIAFPDILMRMLKMLILPLIISSLITGLSGLDAKASGRLGTRAMVYYMSTTIIA AVLGVILVL
 AIHPGNPKLKKQLGPGKKNDEVSSLD AFLDLIRNLPENLVQACFQQIQTVTKKVLVAPPSEEANTKAV
 ISMLNETMNEAPEETKIVIKKGLFKDGMNVLGLIGFFIAFGIAMGKMGEQAKLMVEFFNILNEIVMKLV
 IMIMWYSPLGIACLICGKIIAIKDLEVARQLGMYMITVIVGLIIHGGIFLPLIYFVTRKNPFSFFAGI
 FQAWITALGTASSAGTLPVTFRCLEDNLGIDKRVTRFVLPVGATINMDGTALYEAVAAIFIAQMNGVILD
 GGQIVTVSLTATLASIGAASIPSAGLVTMLLILTAVGLPTEDISLLVAVDWLLDRMRTSVNVVGD SFGAG
 IVYHLSKSELDTIDSQHRMQEDIEMTKTQSIYDDKNHRESNSNQCYYAAHNSVVIDECKVT LAANGKSAD
 CSVEEEPWKREK

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

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:	<ol style="list-style-type: none">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_001077514.4
RefSeq Size:	11571 bp
RefSeq ORF:	1719 bp
Locus ID:	20511
UniProt ID:	P43006
Cytogenetics:	2 54.13 cM
Gene Summary:	Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate (PubMed:7698742, PubMed:7557442, PubMed:9373176). 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. Mediates Cl(-) flux that is not coupled to amino acid transport; this avoids the accumulation of negative charges due to aspartate and Na(+) symport (By similarity). Essential for the rapid removal of released glutamate from the synaptic cleft, and for terminating the postsynaptic action of glutamate (PubMed:9180080).[UniProtKB/Swiss-Prot Function]