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Product datasheet for MR226166

Slc1a2 (NM_001077514) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc1a2 (NM_001077514) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc1a2
Synonyms:	1700091C19Rik; 2900019G14Rik; AI159670; Eaat2; GLT-1; GLT1; MGLT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR226166 representing NM_001077514
Red=Cloning site Blue=ORF Green=Tags(s)

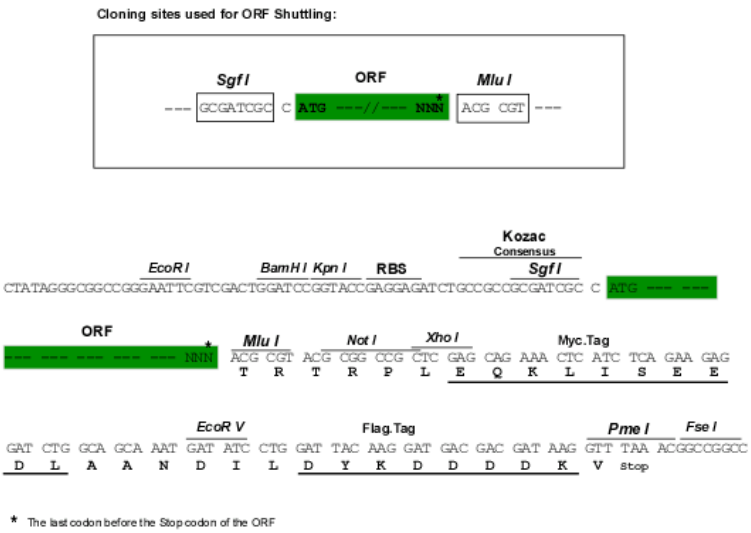
CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCATCAACAGAGGGTGCCAACAATATGCCCAAGCAGGTAGAAGTGCGCATGCATGACAGCCACCTCA
GCTCCGATGAGCCAAAGCACCGAAACCTGGGCATGCGCATGTGCGACAAGCTGGGGAAAAATCTCCTGCT
CTCACTGACTGTGTTTGGTGTCATCCTGGGAGCAGTGTGTGGCGGGCTGCTTCGCTTGGCATCGCCCATC
CACCCTGATGTGGTCATGTTGATAGCCTTCCCGGGGGACATACTCATGAGGATGCTGAAGATGCTCATCC
TCCCTCTTATCATCTCCAGTTTAATCACAGGGTTGTCAGGCCTGGATGCTAAAGCCAGCGGCCGCCTAGG
CACGAGAGCTATGGTGTATTACATGTCCACGACCATCATTGCCGCCGTGCTGGGGGTCATCCTGGTGTTG
GCCATCCACCCAGGCAATCCCAAACTCAAGAAGCAGCTAGGGCCCGGGAAGAAGAACGACGAGGTGTCTA
GCCTGGATGCCTTCCTGGATCTCATTAGAAATCTCTTCCCGGAGAACCTGGTGCAAGCCTGTTTCCAGCA
GATTCAGACAGTGACAAAGAAAGTTCTGGTGGCACCTCCATCTGAGGAGGCCAATACCACCAAGGCGGTC
ATCTCCATGTTGAATGAAACCATGAACGAGGCCCCTGAAGAAACTAAGATCGTTATCAAGAAGGGCCTGG
AGTTCAAGGACGGGATGAACGTCTTAGGTCTGATCGGATTCTTTATTGCTTTCGGCATTGCCATGGGGAA
GATGGGTGAACAGGCCAAGCTGATGGTGGAGTTCTTCAACATTCTGAATGAGATCGTGATGAAGTTAGTG
ATCATGATCATGTGGTACTCCCCTCTGGGTATCGCCTGCTTGATTTGTGGGAAGATCATCGCCATCAAGG
ACTTAGAAGTGGTTGCTAGGCAGCTGGGGATGTACATGATCACCGTGATCGTGGGCCTCATCATTCACGG
GGGCATCTTTCTCCCCTTGATTTACTTTGTAGTGACCAGAAAAAATCCATTCTCCTTTTTTGCTGGCATA
TTCCAAGCCTGGATCACTGCTCTGGGAACTGCTTCCAGTGCTGGAACTTTGCCTGTTACCTTCCGTTGCT
TGGAAGATAATCTAGGGATTGACAAGCGTGTGACCAGATTCGTCCTCCCAGTCGGAGCAACCATTAACAT
GGATGGCACAGCCCTTTACGAGGCTGTGGCAGCCATCTTCATAGCCCAAATGAATGGGGTCATCTTGGAT
GGAGGTCAGATTGTGACTGTAAGCCTTACAGCCACCCTGGCGAGCATTGGTGCAGCCAGTATTCCCAGCG
CCGGGCTGGTCACCATGCTCCTCATTCTCACAGCTGTGGGCCTGCCAACGGAGGATATCAGTCTGCTGGT
GGCGGTGGACTGGCTGCTGGATAGAATGAGAACTTCAGTCAATGTGGTGGGCGATTCTTTTGGGGCTGGG
ATTGTCTATCACCTTTCCAAGTCTGAGCTGGACACCATTGACTCCCAACACCGAATGCAGGAAGACATCG
AAATGACCAAGACGCAGTCCATTTACGACGACAAGAACCACAGGGAAAGCAACTCTAATCAGTGTGTCTA
TGCCGCACACAACTCTGTCGTAATAGATGAGTGCAAGGTAACTCTGGCGGCCAATGGAAAGTCAGCTGAC
TGCAGTGTTGAGGAAGAACCTTGGAAACGTGAAAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001077514

ORF Size: 1716 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.

RefSeq: NM_001077514.4

RefSeq Size: 11571 bp

RefSeq ORF: 1719 bp

Locus ID: 20511

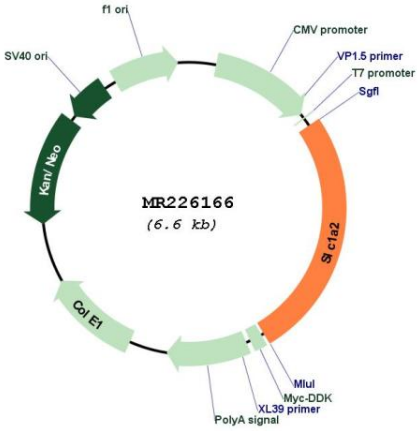
UniProt ID: P43006

Cytogenetics: 2 54.13 cM

MW: 62.5 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: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]

Product images:



Circular map for MR226166