

Product datasheet for **MR224891**

Slc1a6 (NM_009200) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc1a6 (NM_009200) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc1a6
Synonyms:	EAAT4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR224891 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAGCAGCCACGGCAATAGTCTGTTCTGAGGGAGAGCGGTGCCGGTGGGGCTGTCTGCAGGGCCTGC
 AGGACAGCCTGCAGCAGAGAGCACTGCGCACGCGCTTGCCTGCAGACCATGACCCGAGAGCACGTGAG
 GCGCTTCTGCGCCGGAATGCCTTCATCTTGTCTCACAGTCAGCGCTGTGATCATTGGTGTGAGCTTGGCA
 TTTGCCTTGCGCCGTACCAGCTCTCTACCGCCAGATCAAGTACTTCTCCTTCTCCTGGTGTGAGCTGCTCA
 TGAGGATGCTGCAGATGCTGGTGTACCCTCATTGTCTCCAGCCTTGTACAGGTATGGCATCCCTGGA
 CAACAAGCGACAGGGCGGATGGGAATGCGGGCAGCTGTGTACTACATGGTGACTACAGTATTGCAGTT
 TTCATCGGCATCCTAATGGTTACCATCATACTCCTGGGAAGGGCTCAAGGAGGGGCTGCACCGTGAAG
 GCCGAATTGAGACTGTCCAACAGCTGATGCTTTCATGGACCTGGTCCAGAAATATGTTCCACCTAACCT
 TGTGGAGGCTGCTTCAAACAGTTTAAGACACAGTACAGCACAGAGTGGTGACAAGGACAATTGTAAGG
 ACAGACAATGGTTCAGAGCTGGGGCCTCCATGTCTCCACATCCTCAGTAGAAAATGAAACCAGCATCC
 TGGAAAATGTCACCCGGGCTTGGGCACCTGCAGGAGGTGATAAGCTTTGAGGAGACTGTGCCTGTACC
 TGGCTCAGCCAATGGCATCAACGCCCTTGGGCCTTGTGGTCTTCTCTGTGGCCTTTGGGCTGGTCATTGGT
 GGCATGAAGCACAAAGGCCGTGCTCTGAGGGACTTCTTTGACAGCCTCAATGAGGCTATTATGAGGCTGG
 TGGGCATCATCATCTGGTATGCACCAAGTGGGCATCCTGTTCTGATTGCTGGAAGATTCTGAAATGGA
 AGACATGGCTGTCCTTGGAGGTCAGTGGGCATGTACACACTGACTGTATCGTTGGCTTATTCCTTCAT
 GCTGGTGGTGTGTTGCCCTTATCTACTTCTCGTCACCCATCGGAACCCCTTCCCTTCATTGGTGGTA
 TGCTACAGGCATCATCACAGCTATGGTACTCTTCCAGCTCTGCAACTCTGCATATCACTTCCGCTG
 CCTGGAGGAGGGCCTGGGTGTGGATCGTCGCATACCAGGTTCTGTCTGCCTGTGGGGCCACTGTCAAC
 ATGGATGGCACTGCACTCTACGAGGCTTGGCAGCCATCTTTATTGCTCAAGTCAACAACACTATGAGCTCA
 ACCTTGGTCTCAGATCACCACAATCAGCATCACAGCCACAGCTGCCAGCGTAGGAGCAGCTGGCATCCCCCA
 GGCAGGACTGGTTACCATGGTATTGTGCTCACATCCGTCGGCCTGCCACAGAGGACATCACACTGATC
 ATAGCTGTGGATTGGTCTTACCAGCTTCGTACAATGACCAATGTACTGGGGATTGATTGGAGCGG
 CTGTCATTGAGCATTGTCCCAACGGGAGCTGGAGCTGCAGGAGGCTGAGCTGACTCTACCCAGCCTGGG
 GAAACCTATAAGTCACTCATGGCACAAGAAAAGGGGCATCAAGGGTCTGGGGAGGTAATGAGAGCGTC
 ATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR224891 protein sequence
 Red=Cloning site Green=Tags(s)

MSSHGNSLFLRESGAGGGCLQGLQDSLQQRALRTRLRLQTMREHVRRFLRRNAFILLTVSAVIIGVSLA
 FALRPYQLSYRQIKYFSFPGELLMRMLQMLVPLIVSSLVTGMASLDNKATGRMGMRAAVYVMVTVIAV
 FIGILMVTIIHPGKGSKEGLHREGRIETVPTADAFMDLVRNMFPPNLVEACFKQFKTQYSTRVVTRTIVR
 TDNGSELGASMSPTSSVENETSILENVTRALGTLQEVI SFEETVPVPGSANGINALGLVVFVAFGLVIG
 GMKHKGRVLRDFDLSLNEAIMRLVGI IWIYAPVILFLIAGKILEMEDMAVLGGQLGMYTLTVIVGLFLH
 AGGVLPLIYFLVTHRNPFFFIGGMLQALITAMGTSSSSATLPITFRCLEEGLGVDRRITRFVLPVGTATN
 MDGTALYEALAAIFIAQVNNYELNLGQITTSITATAASVGAAGIPQAGLVTMVIIVLTSVGLPTEDITLI
 IAVDWFLDRLRMTNVLGDSIGAAVIEHLSQRELELQEAELTLP SLGPKYKSLMAQEKGASRGRGGNESV
 M

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_009200

ORF Size: 1686 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.

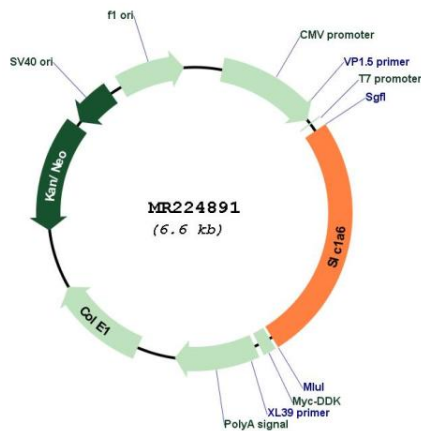
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_009200.1](#), [NM_009200.2](#), [NM_009200.3](#), [NP_033226.1](#)
 RefSeq Size: 2089 bp
 RefSeq ORF: 1686 bp
 Locus ID: 20513
 UniProt ID: [O35544](#)
 Cytogenetics: 10 39.72 cM
 MW: 60.8 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:9379843). 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). 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 (Probable).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR224891