

## Product datasheet for **RR216790**

### **Slc1a3 (NM\_001289941) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Slc1a3 (NM_001289941) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc1a3
Synonyms:	EAAT1; GLAST; GLAST-1; GluT-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RR216790 representing NM\_001289941  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACAAAAAGCAACGGAGAAGAGCCAGGATGGGAAGCAGGATGAAAGATTCCAGCAAGGGTGCGCA  
 AGCGGACGCTCCTGGCCAAGAAGAAAGTTCAGAACATCACCAAGGAGGATGTGAAGAGCTACCTGTTTCG  
 GAATGCCTTTGTGCTACTCACCGTCAGCGCTGTCATTGTGGGAATGGCGGCCCTAGATAGTAAGGCATCT  
 GGAAGATGGGGATGCGAGCTGTGGTCTATTACATGACTACCACCATCATTGCTGTGGTATCGGCATAA  
 TCATTGTCATCATCATCCACCCGAAAGGGCACGAAAGAAAACATGTACAGAGAAGGTAATAATCGTGCA  
 GGTGACTGCCGAGATGCCTTCTGGATTTAATCAGGAACATGTTCCACCCAATCTGGTAGAAGCCTGC  
 TTTAAACAGTTTAAACCAGCTATGAGAAGAGAAGCTTTAAAGTGCCATCCAGGCCAACGAAACTGT  
 TGGGCGCCGTGATCAACAACGTGTAGAGGCCATGGAGACTCTGACCCGGATCCGGGAGGAGATGGTACC  
 CGTTCCTGGGTCTGTGAATGGGGTCAATGCCCTGGGCCTCGTTGTCTTCCATGTGCTTCGGCTTCGTG  
 ATCGGAAACATGAAGGAGCAGGGCAAGCGCTAAGAGAGTTCTTCGACTCTCTCAATGAAGCCATCATGA  
 GATTGGTAGCGGTGATAATGTGGTATGCACCTCTGGGCATCCTCTTCTGATCGCAGGGAAGATTGTTGA  
 GATGGAAGATATGGGTGTGATTGGGGGGCAGCTTGCCATGTATACAGTGACAGTCATCGTCGGCCTCCTC  
 ATTCATGCCGTATCGTCTGCCTCTCCTACTTCTGGTAACCCGGAAGAACCCTGGGTTTTTCATTG  
 GAGGGTTGCTGCAAGCACTCATCACAGCCCTGGGGACCTCTCAAGTCTGCCACCCTGCCATCACTTT  
 CAAGTGCTGGAAGAAAACAATGGTGTGGACAAACGCATCACCAGATTTGTGCTTCCCGTGGGGCCACC  
 ATTAACATGGATGGGACCGCCCTCTACGAGGCTTTGGCCGCCATTTTCATCGCTCAAGTTAAACAATTTG  
 ACCTGAATTTTGGACAGATTATAACAATAAGTATCACAGCCACAGCCGAAGCATTGGGGCAGCTGGCAT  
 TCCTCAGGCCGGTCTAGTCACCATGGTCATCGTGCTGACATCTGTGGCCCTGCCACGGATGACATCACA  
 CTCATCATTGCAGTGGACTGGTTTCTGGACCGCTCCGAACCACCACCAACGTGCTGGGTGACTCCCTCG  
 GGGCCGGGATTGTTGAACACTTGTCCCACATGAACTGAAGAACCAGATGTTGAAATGGGGAACCTCGT  
 GATTGAGGAGAATGAAATGAAAAAGCCGTATCAGCTGATTGCCAGGACAATGAACCAGAGAAAACCCGTG  
 GCAGACAGCGAAACCAAGATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR216790 representing NM\_001289941  
 Red=Cloning site Green=Tags(s)

MTKSNGEPRMGSRMERFQQGVRKRTLLAKKKVQNITKEDVKSylFRNAFVLLTVSAVIVGMAALDSKAS  
 GKMGMRVVVYMTTIIIAVVIGIIIVIIHPGKGTKENMYREGKIVQVTAADAFDLIRNMFPPNLVEAC  
 FKQFKTSYEKRSFKVPIQANETLLGAVINNVSEAMETL TRIEEMVPPVPGSVNGVNALGLVVF SMCFGV  
 IGNMKEQQALREFFDSLNEAIMRLVAVIMWYAPLGILFLIAGKIVEMEDMGVIGGQLAMYTVTVIVGLL  
 IHAVIVLPLLYFLVTRKNPWVFIGLLQALITALGTSSSATLPIITFKLEENNGVDKRI TRFVLPV  
 INMDGTALYEALAAIFIAQVNNFDLNFQIITISITATAASIGAAGIPQAGLVMTMIVLTSVGLPTDDIT  
 LIIAVDWFLDRLRTTTNVLGDSL GAGIVEHL SRHELKNRDVMGNSVIEENEMKPYQLIAQDNEPEKPV  
 ADSETKM

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

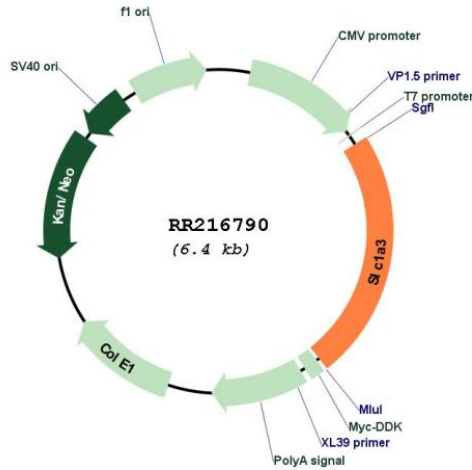
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM\_001289941

ORF Size: 1491 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\\_001289941.1](#), [NP\\_001276870.1](#)

**RefSeq Size:** 3805 bp

**RefSeq ORF:** 1494 bp

**Locus ID:** 29483

**UniProt ID:** [P24942](#)

**Cytogenetics:** 2q16

**MW:** 54.4 kDa

**Gene Summary:** carries out Na<sup>+</sup> dependent transport of glutamate and aspartate; may regulate neurotransmitter concentration in the central nervous system [RGD, Feb 2006]