

Product datasheet for **RR216794**

Slc1a3 (NM_001289942) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc1a3 (NM_001289942) 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:

>RR216794 representing NM_001289942
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACAAAAAGCAACGGAGAAGAGCCAGGATGGGAAGCAGGATGGAAAGATTCCAGCAAGGGGTGCGCA
 AGCGGACGCTCCTGGCCAAGAAGAAAGTTCAGAACATCACCAAGGAGGATGTGAAGAGCTACCTGTTTCG
 GAATGCCTTTGTGCTACTCACCGTCAGCGCTGTATTGTGGGTACAATCCTTGGATTGCGCTCCGACCG
 TATAAAATGAGCTACCGGAGGTCAAGTACTTCTCCTTCTGGGGAGCTTCTGATGCGGATGCTGCAGA
 TGTTGGTCTTACCCTGATCATCTCCAGTCTTGTACAGGAATGGCGGCCCTAGATAGTAAGGCATCTGG
 GAAGATGGGGATGCGAGCTGTGGTCTATTACATGACTACCACCATCATTGCTGTGGTGTGCGCATAATC
 ATTGTCATCATCATCCACCCCGAAAGGGCACGAAAGAAAACATGTACAGAGAAGGTAATAATCGTGCAGG
 TACTGCCGAGATGCCTTCTGGATTTAATCAGGAACATGTTCCACCCAATCTGGTAGAAGCCTGCTT
 TAAACAGTTTAAAACCAGCTATGAGAAGAGAAGCTTTAAAGTGCCATCCAGGCCAACGAAACACTGTTG
 GCGCCGTGATCAACAACGTGTACAGAGCCATGGAGACTCTGACCCGGATCCGGGAGGAGATGGTACCCG
 TTCTGGGTCTGTGAATGGGGTCAATGCCTGGGCCTCGTTGTCTTCTCCATGTGCTTCCGCTTCGTGAT
 CGGAAACATGAAGGAGCAGGGGCAAGCGCTAAGAGAGTCTTTCGACTCTCTCAATGAAGCCATCATGAGA
 TTGGTAGCGGTGATAATGTGGTATGCACCTCTGGGCATCCTCTTCTTGTGATCGCAGGAAGATTGTTGAGA
 TGGAAGATATGGGTGTGATTGGGGGGCAGCTTCCCATGTATACAGTGACAGTCATCGTCCGCCTCCTCAT
 TCATGCCGTATCGTCTGCCTCCTCTACTTCTGTAACCCGGAAGAACCCCTGGGTTTTATTGGA
 GGGTTGCTGCAAGCACTCATCACAGCCCTGGGGACCTCCTCAAGTCTGCCACCCCTGCCATCACTTTCA
 AGTGCCTGGAAGAAAACAATGGTGTGGACAAACGCATCACCAGATTTGTGCTTCCCGTGGGGGCCACCAT
 TAACATGGATGGGACCGCCTCTACGAGGCTTTGGCCGCCATTTTCATCGCTCAAGTTAACAACCTTGTAC
 CTGAATTTTGGACAGATTATAACAATAAGGGACCGCCTCCGAACCACCACCAACGTGCTGGGTGACTCCC
 TCGGGGCCGGATTGTTGAACACTTGTCCCGACATGAACTGAAGAACCGAGATGTTGAAATGGGGAACCTC
 CGTGATTGAGGAGAATGAAATGAAAAGCCGTATCAGCTGATTGCCCAGGACAATGAACCAGAGAAAACCC
 GTGGCAGACAGCGAAACCAAGATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR216794 representing NM_001289942
 Red=Cloning site Green=Tags(s)

MTKSNGEPRMGSRMERFQQGVRKRTLLAKKKVQNITKEDVKSylFRNAFVLLTVSAVIVGTILGFALRP
 YKMSYREVKYFSFPGELLMRMLQMLVPLIISSLVTGMAALDSKASGKMGMRVYVYMTTIIAVVIGII
 IVIIHPGKGTKENMYREGKIVQVTAADAFDLIRNMFPPNLVEACFKQFKTSYEKRSFKVPIQANETLL
 GAVINNVSEAMETLTRIEMVPPVPGSVNGVNALGLVVF SMCFGFVIGNMKEQGQALREFFDSLNEAIMR
 LVAVIMWYAPLGILFLIAGKIVEMEDMGVIGQLAMYTVTVIVGLLIHAVIVLPLLYFLVTRKNPWFVIG
 GLLQALITALGTSSSATLPITFKLEENNGVDKRITRFVLPVGATINMDGTALYEALAAIFIAQVNNFD
 LNFQIITIRDRLRTTNNVLGDSL GAGIVEHL SRHELKNRDVEMGNSVIEENEMKPYQLIAQDNEPEK
 VADSETKM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

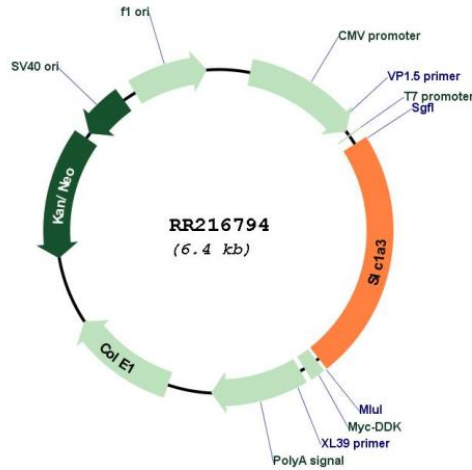
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001289942

ORF Size: 1494 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_001289942.1](#), [NP_001276871.1](#)

RefSeq Size: 3797 bp

RefSeq ORF: 1497 bp

Locus ID: 29483

UniProt ID: [P24942](#)

Cytogenetics: 2q16

MW: 55.3 kDa

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