

Product datasheet for **RC238567**

EAAT1 (SLC1A3) (NM_001289939) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EAAT1 (SLC1A3) (NM_001289939) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC1A3
Synonyms:	EA6; EAAT1; GLAST; GLAST1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238567 representing NM_001289939
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACTAAAAGCAATGGAGAAGAGCCCAAGATGGGGGCGAGGATGGAGAGATTCCAGCAGGGAGTCCGTA
 AACGCACACTTTTGGCCAAGAAGAAAGTGCAGAACATTACAAAGGAGGATGTTAAAAGTTACCTGTTTCG
 GAATGCTTTTGTGCTGCTCACAGTCACCCTGTCAATTGTGGGAATGGCGGCGCTAGATAGTAAGGCATCA
 GGAAGATGGGAATGCGAGCTGTAGTCTATTATAGACTACCACCATCATTGCTGTGGTATTGGCATAA
 TCATTGTCATCATCATCCATCCTGGGAAGGGCACAAGGAAAACATGCACAGAGAAGGCAAAATTGTACG
 AGTGACAGCTGCAGATGCCTTCTGGACTTGATCAGGAACATGTTCCCTCCAAATCTGGTAGAAGCCTGC
 TTTAAACAGTTTAAAACCAACTATGAGAAGAGAAGCTTTAAAGTGCCATCCAGGCCAACGAAACGCTTG
 TGGGTGCTGTGATAAACAATGTGTCTGAGGCCATGGAGACTCTTACCGAATCACAGAGGAGCTGGTCCC
 AGTTCCAGGATCTGTGAATGGAGTCAATGCCCTGGGTCTAGTTGTCTTCCATGTGCTTCGGTTTTGTG
 ATTGAAAACATGAAGGAACAGGGCAGGCCCTGAGAGAGTTCTTTGATTCTTAAACGAAGCCATCATGA
 GACTGGTAGCAGTAATAATGTGGTATGCCCCCGTGGGTATTCTTCTTCTGATTGTGGAAGATTGTGGA
 GATGGAAGACATGGGTGTGATTGGGGGGCAGCTTGCCATGTACACCGTACTGTCATTGTTGGCTTACTC
 ATTCACGCAGTCATCGTCTTGCCACTCCTACTTCTTGGTAACACGGAAAAACCCTTGGGTTTTATTG
 GAGGGTTGCTGCAAGCACTATCACCGCTCTGGGGACCTTCAAGTTCTGCCACCCTACCCATCACCTT
 CAAGTGCTGGAAGAGAACAATGGCGTGGACAAGCGCGTACCAGATTCGTGCTCCCGTAGGAGCCACC
 ATTAACATGGATGGGACTGCCCTCTATGAGGCTTTGGCTGCCATTTTCATTGCTCAAGTTAAACAATTTG
 AACTGAACCTTCGGACAAAATTATCAATCAGCATCACAGCCACAGCTGCCAGATTGGGGCAGCTGGAAT
 TCCTCAGGCGGGCTGGTCACTATGGTCAATTGTGCTGACATCTGTCGGCCTGCCACTGACGACATCAGC
 CTCATCATCGCGGTGGACTGGTTCTGGATCGCCTCCGGACCACCAACGTAAGTGGGAGACTCCCTGG
 GAGCTGGGATTGTGGAGCACTTGTACGACATGAAGTGAAGAACAGAGATGTTGAAATGGGTAAGTCACT
 GATTGAAGAGAATGAAATGAAGAAACCATCAACTGATTGCACAGGACAATGAAACTGAGAAACCCATC
 GACAGTGAACCAAGATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238567 representing NM_001289939
 Red=Cloning site Green=Tags(s)

MTKSNGEPEPKMGGRMERFQQGVRKRTLLAKKKVQNITKEDVKSYLFRNAFVLLTVTAVIVGMAALDSKAS
 GKMGMRVVVYMTTIIIAVVIGIIIVIIHPGKGTKENMHREGKIVRVTAADAFDLIRNMFPPNLVEAC
 FKQFKTNYEKRSFKVPIQANETLVGAVINNVSEAMETLTRITEELVPVPGSVNGVNLGLVVFVSMCFGV
 IGMKEQQALREFFDSLNEAIMRLVAVIMWYAPVGIIFLIAGKIVEMEDMGVIGGLAMYTIVTVIVGLL
 IHAVIVLPLLYFLVTRKNPWVFIGLLQALITALGTSSSATLPIITFKLEENNGVDKRVTRFVLPVGT
 INMDGTALYEALAAIFIAQVNNFELNFGQIITISITATAASIGAAGIPQAGLVMTMIVLTSVGLPTDDIT
 LIIAVDWFLDRLRTTNNVLGDSL GAGIVEHL SRHELKNRDVMGNSVIEENEMKPYQLIAQDNETEKPI
 DSETKM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

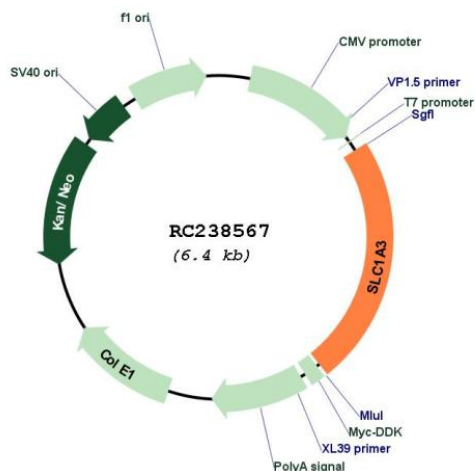
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001289939

ORF Size: 1488 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_001289939.1](#), [NP_001276868.1](#)

RefSeq Size: 4050 bp

RefSeq ORF: 1491 bp

Locus ID: 6507

Cytogenetics: 5p13.2

Protein Families: Transmembrane

MW: 54.7 kDa

Gene Summary: This gene encodes a member of a member of a high affinity glutamate transporter family. This gene functions in the termination of excitatory neurotransmission in central nervous system. Mutations are associated with episodic ataxia, Type 6. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Feb 2014]