

Product datasheet for **RG238567**

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:	TurboGFP
Symbol:	SLC1A3
Synonyms:	EA6; EAAT1; GLAST; GLAST1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG238567 representing NM_001289939.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGACTAAAAGCAATGGAGAAGAGCCCAAGATGGGGGCCAGGATGGAGAGATTCCAGCAGGGAGTCCGT
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CGGAATGCTTTTGTGCTGCTCACAGTCACCGCTGTCATTGTGGGAATGGCGGCGCTAGATAGTAAGCA
TCAGGGAAGATGGGAATGCGAGCTGTAGTCTATTATGACTACCACCATCATTGCTGTGGTGATTGGC
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CTGGTCCCAGTCCAGGATCTGTGAATGGAGTCAATGCCCTGGGTCTAGTTGCTTCTCCATGTGCTTC
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GTACTGGGAGACTCCCTGGGAGCTGGGATTGTGGAGCACTGTACGACATGAAGTGAAGAACAGAGAT
GTTGAAATGGGTAAGTCAAGTATTGAAGAGAATGAAATGAAGAAACCATATCAACTGATTGCACAGGAC
AATGAAACTGAGAAACCCATCGACAGTGAACCAAGATG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence:

>Peptide sequence encoded by RG238567
 Blue=ORF Red=Cloning site Green=Tag(s)

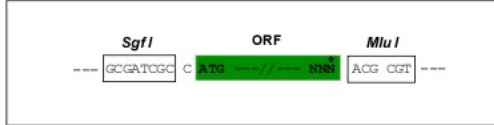
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MTKSNGEPEKMGGRMERFQQGVRKRTLLAKKKVQNIKEDVKSYLEFRNAFVLLTVTAVIVGMAALDSKA
SGKMGMRVAVVYMTTIIIAVVIIGIIIVIIHHPGKGTENMHREGKIVRVTAADAFDLIRNMFPPNLVE
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GFVIGNMKEQQALREFFDLSNEAIMRLVAVIMWYAPVGIILFLIAGKIVEMEDMGVIGGQLAMYTVTVI
VGLLIHAVIVLPLLYFLVTRKNPWFVIGLLQALITALGTSSSSATLPIITFKLEENNGVDKRVTRFVL
PVGATINMDGTALYEALAAIFIAQVNNFELNFGQIITISITATAASIGAAGIPQAGLVTMVIVLTSVGL
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NETEKPIDSETKM
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SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDVSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoRI
BamHI *KpnI*
RBS
Kozac
Consensus
SgfI
AscI

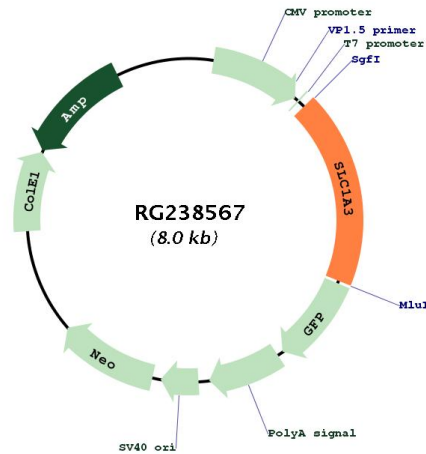
CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

HindIII
NheI *RsrII*
MluI
NotI
XhoI
GFP Tag

CAAGCTTAAGCTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- --- ---
T R T R P L E M E S D - - -

PmeI
FseI

--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
 - - - E E R V Stop

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).
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]