

Product datasheet for **RG207205**

EAAT1 (SLC1A3) (NM_004172) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EAAT1 (SLC1A3) (NM_004172) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	EAAT1
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:

>RG207205 representing NM_004172
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACTAAAAGCAATGGAGAAGAGCCCAAGATGGGGGCAGGATGGAGAGATTCCAGCAGGGAGTCCGTA
 AACGCACACTTTTGGCCAAGAAGAAAGTGCAGAACATTACAAAGGAGGATGTTAAAAGTTACCTGTTTCG
 GAATGCTTTTGTGCTGCTCACAGTACCCTGTGATTGTGGGTACAATCCTTGGATTTACCTCCGACCA
 TACAGAATGAGCTACCGGAAGTCAAGTACTTCTCCTTCTGGGAACTTCTGATGAGGATGTTACAGA
 TGCTGGTCTTACCCTTATCATCTCCAGTCTTGTACAGGAATGGCGGCGCTAGATAGTAAGGCATCAGG
 GAAGATGGGAATGCGAGCTGTAGTCTATTATGACTACCACCATCATTGCTGTGGTATTGGCATAATC
 ATTGTCATCATCATCCATCCTGGGAAGGGCACAAAGGAAAACATGCACAGAGAAGGCAAAATTGTACGAG
 TGACAGCTGCAGATGCCTTCTGGACTTGATCAGGAACATGTTCCCTCCAATCTGGTAGAAGCCTGCTT
 TAAACAGTTTAAAACCACTATGAGAAGAGAAGCTTTAAAGTGCCATCCAGGCCAACGAAACGCTTG
 GGTGCTGTGATAAACAATGTGTCTGAGGCCATGGAGACTTACCCTCAATCACAGAGGAGCTGGTCCAG
 TTCCAGGATCTGTGAATGGAGTCAATGCCTGGGTCTAGTTGTCTTCTCCATGTGCTTCCGTTTTGTGAT
 TGGAAACATGAAGGAACAGGGGCAGGCCCTGAGAGAGTTCTTTGATTCTTAAACGAAGCCATCATGAGA
 CTGGTAGCAGTAATAATGTGGTATGCCCGTGGGTATTCTTCTTCTGATTGCTGGGAAGATTGTGGAGA
 TGGAAACATGGGTGTGATTGGGGGCAGCTTGCCATGTACACCGTGACTGTGATTGTTGGCTTACTCAT
 TCACGCAGTATCGTCTTGCCACTCCTCTACTTCTTGGTAACACGGAAAAACCTTGGGTTTTTATTGGA
 GGGTGTCTGCAAGCACTCATCACCGCTCTGGGGACCTTCAAGTCTGCCACCCATCCCATCACCTTCA
 AGTGCCTGGAAGAGAACAATGGCGTGGACAAGCGCGTACCAGATTCTGTGCTCCCGTAGGAGCCACCAT
 TAACATGGATGGGACTGCCCTCTATGAGGCTTTGGTGCATTTTCATTGCTCAAGTTAACAACCTTGAA
 CTGAACCTCGGACAAATTATTACAATCAGCATCACAGCCACAGCTGCCAGTATTGGGGCAGCTGGAATTC
 CTCAGGCGGGCCTGGTCACTATGGTCATTGTGCTGACATCTGTGCGCCTGCCACTGACGACATCACGCT
 CATCATCGCGGTGGACTGGTTCCTGGATCGCCTCCGGACCACCACCAACGTAAGGAGACTCCCTGGGA
 GCTGGGATTGTGGAGCACTTGTACGACATGAAGTGAAGAACAGAGATGTTGAAATGGGTAAGTCAAGTGA
 TTGAAGAGAATGAAATGAAGAAACCATATCAACTGATTGCACAGGACAATGAAACTGAGAAACCCATCGA
 CAGTGAACCAAGATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG207205 representing NM_004172
 Red=Cloning site Green=Tags(s)

MTKSNGEPEPKMGRMERFQQGVRKRTLLAKKKVQNIKEDVKSYLFRNAFVLLTAVIVGTLGLFTLRP
 YRMSYREVKYFSFPGELLMRMLQMLVPLIISSLVTGMAALDSKASGKMGMRVAVVYMTTIIIAVIGII
 IVIIIHGKGTKENMHREGKIVRVTAADAFDLIRNMFPPNLVEACFKQFKTNYEKRSFKVPIQANETLV
 GAVINNVSEAMETLTRITEELVPVPGSVNGVNLGLVVFVSMCFGFVIGNMKEQQQALREFDSLNEAIMR
 LVAVIMWYAPVIGLFLIAGKIVEMEDMGVIGGQLAMYTVTVIVGLLIHAVIVLPLLYFLVTRKNPWVFIG
 GLLQALITALGTSSSSATLPITFKLEENNGVDKRVTRFVLPVGATINMDGTALYEALAAIFIAQVNNFE
 LNFQIITISITATAASIGAAGIPQAGLVTMIVLTSVGLPTDDITLIIAVDWFLLDRLRTTNNVLDGSLG
 AGIVEHLRHELKNRDVEMGNSVIEENEMKKPYQLIAQDNETEKPIDSETKM

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_004172

ORF Size: 1626 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).

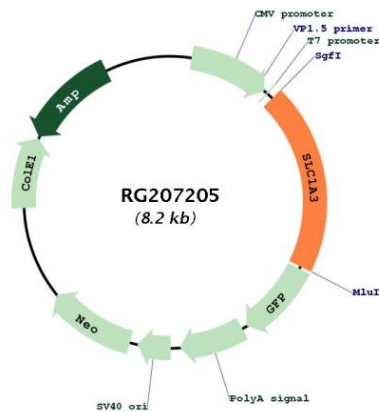
Reconstitution Method:

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_004172.5](#)
RefSeq Size: 4188 bp
RefSeq ORF: 1629 bp
Locus ID: 6507
UniProt ID: [P43003](#)
Cytogenetics: 5p13.2
Domains: SDF
Protein Families: Transmembrane

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]

Product images:



Circular map for RG207205