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Product datasheet for SC117514

EAAT1 (SLC1A3) (NM_004172) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EAAT1 (SLC1A3) (NM_004172) Human Untagged Clone
Tag:	Tag Free
Symbol:	EAAT1
Synonyms:	EA6; EAAT1; GLAST; GLAST1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>OriGene ORF within SC117514 sequence for NM_004172 edited (data generated by NextGen Sequencing)

ATGACTAAAAGCAATGGAGAAGAGCCCAAGATGGGGGGCAGGATGGAGAGATTCCAGCAG
GGAGTCCGTAAACGCACACTTTTGGCCAAGAAGAAAGTGCAGAACATTACAAAGGAGGAT
GTTAAAAGTTACCTGTTTCGGAATGCTTTTGTGCTGCTCACAGTCACCGCTGTCATTGTG
GGTACAATCCTTGGATTTACCCTCCGACCATACAGAATGAGCTACCGGGAAGTCAAGTAC
TTCTCCTTTCCTGGGGAACTTCTGATGAGGATGTTACAGATGCTGGTCTTACCACTTATC
ATCTCCAGTCTTGTCACAGGAATGGCGGCGCTAGATAGTAAGGCATCAGGGAAGATGGGA
ATGCGAGCTGTAGTCTATTATATGACTACCACCATCATTGCTGTGGTGATTGGCATAATC
ATTGTCATCATCATCCATCCTGGGAAGGGCACAAAGGAAAACATGCACAGAGAAGGCAAA
ATTGTACGAGTGACAGCTGCAGATGCCTTCCTGGACTTGATCAGGAACATGTTCCCTCCA
AATCTGGTAGAAGCCTGCTTTAAACAGTTTAAAACCAACTATGAGAAGAGAAGCTTTAAA
GTGCCCATCCAGGCCAACGAAACGCTTGTGGGTGCTGTGATAAACAATGTGTCTGAGGCC
ATGGAGACTCTTACCCGAATCACAGAGGAGCTGGTCCCAGTTCCAGGATCTGTGAATGGA
GTCAATGCCCTGGGTCTAGTTGTCTTCTCCATGTGCTTCGGTTTTGTGATTGGAAACATG
AAGGAACAGGGGCAGGCCCTGAGAGAGTTCTTTGATTCTCTTAACGAAGCCATCATGAGA
CTGGTAGCAGTAATAATGTGGTATGCCCCCGTGGGTATTCTCTTCCTGATTGCTGGGAAG
ATTGTGGAGATGGAAGACATGGGTGTGATTGGGGGGCAGCTTGCCATGTACACCGTGACT
GTCATTGTTGGCTTACTCATTCACGCAGTCATCGTCTTGTCACTCCTCTACTTCTTGGTA
ACACGGAAAAACCCTTGGGTTTTTATTGGAGGGTTGCTGCAAGCACTCATCACCGCTCTG
GGGACCTCTTCAAGTTCTGCCACCCTACCCATCACCTTCAAGTGCCTGGAAGAGAACAAT
GGCGTGGACAAGCGCGTCACCAGATTCGTGCTCCCCGTAGGAGCCACCATTAACATGGAT
GGGACTGCCCTCTATGAGGCTTTGGCTGCCATTTTCATTGCTCAAGTTAACAACTTTGAA
CTGAACTTCGGACAAATTATTACAATCAGCATCACAGCCACAGCTGCCAGTATTGGGGCA
GCTGGAATTCCTCAGGCGGGCCTGGTCACTATGGTCATTGTGCTGACATCTGTCGGCCTG
CCCACTGACGACATCACGCTCATCATCGCGGTGGACTGGTTCCTGGATCGCCTCCGGACC
ACCACCAACGTACTGGGAGACTCCCTGGGAGCTGGGATTGTGGAGCACTTGTCACGACAT
GAACTGAAGAACAGAGATGTTGAAATGGGTAACTCAGTGATTGAAGAGAATGAAATGAAG
AAACCATATCAACTGATTGCACAGGACAATGAAACTGAGAAACCCATCGACAGTGAAACC
AAGATGTAG

Clone variation with respect to NM_004172.4
1000 c=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004172 unedited
GGGTTCAAATTTGTATACGACTCACTATAGGCGGCCGCGAATTCGCACGAGGGTCAGGGC
TAGCCTGCCTGCTTACGCGCGCTGCGGATTGTTGCTCCGTTGTACCTGCTGGGGAATTCA
CCTCGTTACTGCTTGATATCTTCCACCCCTTACAAAATCAGAAAAGTTGTGTTTTCTAAT
ACCAAAGAGGAGGTTTGGCTTTCTGTGGGTGATTCCCAGACACTGAAGTGCAAAGAAGAG
ACCCTCCTAGAAAAGTAAAATATGACTAAAAGCAATGGAGAAGAGCCCAAGATGGGGGGC
AGGATGGAGAGATTCCAGCAGGGAGTCCGTAAACGCACACTTTTGGCCAAGAAGAAAGTG
CAGAACATTACAAAGGAGGATGTTAAAAGTTACCTGTTTCGGAATGCTTTTGTGCTGCTC
ACAGTCACCGCTGTCATTGTGGGTACAATCCTTGGATTTACCCTCCGACCATACAGAATG
AGCTACCGGGAAGTCAAGTACTTCTCCTTTCCTGGGGAACTTCTGATGAGGATGTTACAG
ATGCTGGTCTTACCACTTATCATCTCCAGTCTTGTCACAGGAATGGCGGCGCTAGATAGT
AAGGCATCAGGGAAGATGGGAATGCGAGCTGTAGTCTATTATATGACTACCACCATCATT
GCTGTGGTGATTGGCATAATCATTGTCATCATCATCCATCCTGNGAAGGGCACAAAGGAA
AACATGCACAGAGAAGGCAAAATTGTACGAGTGACAGCTGCAGATGCCTTCCTGGACTTG
ATCAGGAACATGTTCCCTTNCANATCTGTAGAAGCCTGCTTTANACAGTTTAAAACCAAC
TATGAGAAGAGAAGCTNNTAAGTGCCCATCCAGACCAACGAAACGCTTGTGGGTGCTGTG
ATAAACAATGTGTCTGA

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3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_004172 unedited
GCAACTTTCCAGGGCCAGGNAAAGCACTGGGGAGGGGTCACAGGGATGCCACCCGGGATC
TGTTCAGGAAACAGCTATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTT
TTTTAATGTAAAACTATTTTTTTCTTTATTGAAAATACATCTACAAAGTAATGCTTCCCA
GTCCACACTGAGTGCATGTGTATGCAAAGCCTGTGATGGCTTGGCGAGGGGATGGGCTCC
CCACAGGACCTTTCCATAAGAAATGGTTAGTATATTAAAAAACACATATTGTGTAACAGA
ATTAAGTTGATATGATTAAGTCTTTGCTCTACTAGTGTCTTAAGAGGACAGCCACGTACT
TTAACATTTGTAGTGTATTTCCGAAATAGAGCCTCGACATTAAATGGTTACTGCACCACA
GCCTAATGTTAACTTTTATGCACAGAATGCTTGGGGTCTATATAAAAATATCTCTAATTG
TATATCAGAGGATCTATGTCTAGATTTTTCAGTTTGTTAGCATAATTAAGTCCATTCTTC
ACCATTTTCAGCCAGAAACTCAAACACAGCTGCTACTGCCTGACAGCTCCCACTCAGCGT
CTTTGACTGGATATTCCTTANGGGGTAAAAATTAATCTCTAAACCTGGNGAGCTGCCTTG
CCTGAAACTAATGCCCNCCTGCTGTTTTTTTCTCATAAACCTCATTGACAGNNGNCTTCA
TACTGGGATTCATCTTCTACCATTTTCTCTTNATGGNNACACAAACANACANAAAGCAAC
CCCACTTCAGCNTGAAAGTTTTTGAATGATTTGGAATAAGTGGGGATTCCAAACAAATAA
AATATTTTGGTTTCCCTCATTCTAAGGGACCTTTGGATTAAAGAAAAACACTTTCNATAA
NGAATACCCACTCACTCCTGGGACTTCTTTAAAGAACTCATCTTTTGA
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Restriction Sites: NotI-NotI

ACCN: NM_004172

Insert Size: 1629 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_004172.3, NP_004163.2

RefSeq Size: 3983 bp

RefSeq ORF: 1629 bp

Locus ID: 6507

UniProt ID: P43003

Cytogenetics: 5p13.2

Domains: SDF

Protein Families: Transmembrane

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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]
Transcript Variant: This variant (GLAST) represents the longest transcript and encodes the longest protein (isoform 1).

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