

Product datasheet for **SC125329**

EAAT4 (SLC1A6) (NM_005071) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EAAT4 (SLC1A6) (NM_005071) Human Untagged Clone
Tag:	Tag Free
Symbol:	EAAT4
Synonyms:	EAAT4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for NM_005071 edited
GCACGAGCAGGGCCGGCCGGATCCCTCCCGCAGCATAGCGCGTCCCGGCTCCGCGCCGG
TGCTCCACGGTCCGGTCCCGCGCCGGTGTGTCACAGTCCCTGGCGGGTCCCGCGGCC
CCGGCCGGGCGCTTCGCCGGGCTCCGGCTCCTGCATCCGGGCGCAGCGCGCAGGCCGAGG
CGCGGGCAGGCCGCCCGCCCGCTCCGGACGCCACCATGAGCAGCCATGGCAACAGCCT
GTTCTTCCGGAGAGCGGCCAGCGGTGGGCGGGTGGGCTGGCTGCAGCGGTGCAGGA
AAGCTGCAGCAGAGACTGCGCACGCGCCTGCGCCTGCAGACCATGACCCTCGAGCA
CGTGCTGCGCTTCTGCGCCGAAACGCCTTATTCTGCTGACGGTCAGCGCGTGGTTCAT
TGGGGTACGCTGGCCTTGGCCCTGCGCCCATATCAGCTCACCTACCGCCAGATCAAGTA
CTTCTCTTTTCTGGAGAGCTTCTGATGAGGATGCTGCAGATGCTGGTGTACCTCTCAT
TGTCTCCAGCCTGGTACAGGTATGGCATCCCTGGACAACAAGGCCACGGGGCGGATGGG
GATGCGGGCAGCTGTGTACTACATGGTGACCACCATCATCGCGGTCTTCATCGGCATCCT
CATGGTACCATCATCCATCCCGGAAGGGCTCCAAGGAGGGGCTGCACCGGAGGGCCG
GATCGAGACCATCCCACAGCTGATGCCTTCATGGACCTGATCAGAAATATGTTCCACC
AAACCTTGTGGAGCCTGCTTCAAACAGTTCAAGACGCAGTACAGCACGAGGGTGGTAAC
CAGGACCATGGTGAAGACAGAGAACGGGTCTGAGCCGGTGCCTCCATGCCTCCTCCATT
CTCAGTGGAGAACGGAACAGCTTCTGAAAATGTCACTCGGGCCTTGGGTACCCTGCA
GGAGATGCTGAGCTTTGAGGAGACTGTACCCGTGCCTGGCTCCGCCAATGGCATCAACGC
CCTGGGCTCGTGGTCTTCTGTGGCCTTTGGCTGGTATTGGTGGCATGAAACACAA
GGGCAGAGTCCCTCAGGGACTTCTCGACAGCCTCAATGAGGCTATTATGAGGCTGGTGGG
CATCATTATCTGGTATGCACCTGTGGGCATCCTGTTCTGATTGCTGGGAAGATTCTGGA
GATGGAAGACATGGCCGCTCCTGGGGGTGAGTGGGCATGTACACCCTGACCGTCATCGT
GGGCTGTTCTCCATGCCGGCATTGTCCTTCCCCTCATCTACTTCTCGTCACTCACCG
GAACCCCTTCCCCTTATTGGGGGCATGCTACAAGCCCTCATCACCCTATGGGCACGTC
TTCAGCTCGGCAACGCTGCCCATCACCTTCCGCTGCCTGGAGGAGGGCCTGGGTGTGGA
CCGCCGCATCACCAGGTTCTGCTCCTGCCGTGGGCGCCACGGTCAACATGGATGGCACTGC
CCTCTACGAGGCCCTGGCTGCCATCTTCATTGCTCAAGTTAACTACGAGCTCAACCT
GGGTGAGATCACAACCATCAGCATCACGGCCACAGCAGCCAGTGTGGGGCTGCTGGCAT
CCCCCAGGCGGGTCTGGTACCATGGTCATTGTGCTTACGTGGTGGCTTGGCCACGGA
AGACATCAGCTCATATTGCCGTGGACTGGTTCCTTGACCGGCTTCGCACAATGACCAA
CGTACTGGGGACTCAATTGGAGCGGCCGTCATCGAGCACTTGTCTCAGCGGGAGCTGGA
GCTTACGGAAGCTGAGCTTACCCTCCCCAGCCTGGGGAACCCTACAAGTCCCTCATGGC
ACAGGAGAAGGGGCATCCCGGGACGGGGAGGCAACGAGAGTGCTATGTGAGGGGCTC
CAGCTCTGCCCCCAGAGAGGAGGGAAGGGGGCTGGGGAGGGGAGTCTGGTGACACAT
CTGTTGCCCAACTGACCGTGGGCTGAACACACGTTCTGCTTGACTCATTTAGGGGGAGG
GAAAAGTAAAATAAAGGAGCAGGAATGAAAGGTAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA
    
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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_005071 unedited NNCGTACCATTGTATACGACTCACTATAGGCGGCCGGAATTCGCACGAGCAGGGCCG GCCCGGATCCCTCCCGCAGCATAGCGCGTCCCGGCTCCGCGCCGGTGCCTCCACGGTCCG GTCCCCGCGCCGGTGTGCACAGTCCCTGGCGGGTCCCGCGGCCCGGGCCGGCGCTTC GCCGGGTCCGGTCTCTGCATCCGGGCGCAGCGCGCAGGCCGAGGCGGGCAGGCCGCC CCCGCCGCTCCGGACGCCACCATGAGCAGCCATGGCAACAGCCTGTTCTTCGGGAGAG CGGCCAGCGGCTGGGCCGGTGGGCTGGCTGCAGCGGCTGCAGGAAAGCCTGCAGCAGAG AGCACTGCGCACGCGCCTGCGCCTGCAGACCATGACCCTCGAGCACGTGCTGCGCTTCT GCGCCGAAACGCCTTCATTCTGTGTACGGTCAGCGCCGTGGTCATTGGGGTCAGCCTGGC CTTTGCCCTGCGCCATATCAGCTCACCTACCGCCAGATCAAGTACTTCTCTTTCTG AGAGCTTCTGATGAGGATGCTGCAGATGCTGGTGTACCTCTCATTGTCTCCAGCCTGGT CACAGGTATGGCATCCCTGGACAACAAGGCCACGGNGCGGATGGGGATGCNNGCAGCTGT GTACTACATGGTGACCACCATCATCGCGGGTCTCATCGGCATCCTCATGGTCACCATCAT CCATCCCGGAAGGGCTCCAGGANGGGTGCACCGNAGGGCCGNATCGAGACCATCCC ACAGCTGATGCCTTCATGGACCTGATCAGAAATATGTTNCACCANACCTGTNAGGCNCC TGCTCAACAGTCAAGACGCATCAGCACGAGGGTGGTAACCAAGACATGGTGAGACANANNA CGGTCTGAGCCGNTGCCTCATGCCTCTCATT
Restriction Sites:	NotI-NotI
ACCN:	NM_005071
Insert Size:	2100 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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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:	<u>NM_005071.1</u> , <u>NP_005062.1</u>
RefSeq Size:	1719 bp
RefSeq ORF:	1695 bp
Locus ID:	6511
UniProt ID:	<u>P48664</u>
Cytogenetics:	19p13.12

Domains:	SDF
Protein Families:	Transmembrane
Gene Summary:	<p>Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate (PubMed:7791878). Functions as a symporter that transports one amino acid molecule together with two or three Na(+) ions and one proton, in parallel with the counter-transport of one K(+) ion. Mediates Cl(-) flux that is not coupled to amino acid transport; this avoids the accumulation of negative charges due to aspartate and Na(+) symport (By similarity). Plays a redundant role in the rapid removal of released glutamate from the synaptic cleft, which is essential for terminating the postsynaptic action of glutamate (Probable).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and its transcription extends past a splice site that is used in variant 1, resulting in a novel 3' coding region and 3' UTR compared to variant 1. It encodes isoform 2 which is longer and has a distinct C-terminus, compared to isoform 1.</p>