

## Product datasheet for **SC117816**

### SLC25A12 (NM\_003705) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC25A12 (NM_003705) Human Untagged Clone
Tag:	Tag Free
Symbol:	SLC25A12
Synonyms:	AGC1; ARALAR; DEE39; EIEE39
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC117816 sequence for NM\_003705 edited (data generated by NextGen Sequencing)

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ATGGCGGTCAAGGTGCAGACAAC TAAGCGAGGGGATCCTCATGAGTTAAGAAACATATTT
CTACAGTATGCCAGTACTGAGGTTGATGGAGAGCGTTACATGACCCAGAAAGACTTTGTT
CAGCGCTATCTTGGACTGTATAATGATCCAAATAGTAACCCAAAGATCGTGCAGCTTTG
GCAGGAGTAGCTGATCAAACCAAGGATGGGTTGATCTCCTATCAAGAGTTTTTGGCATT
GAATCTGTTTTATGTGCTCCAGATTCATGTTTCATAGTGGCTTTCCAGTTGTTTGACAAG
AGTGAAAATGGAGAGGTGACATTTGAAAATGTCAAAGAAATTTTTGGACAGACTATTATT
CATCATCATATCCCTTTAACTGGGATTGTGAATTTATCCGACTGCATTTTGGGCATAAC
CGGAAGAAGCATCTTAAC TACACAGAATTCACGCAGTTTCTCCAGGAGCTGCAATTGGAA
CATGCAAGACAAGCCTTTGCACTCAAAGACAAAAGCAAAGTGGCATGATTTCTGGTCTG
GATTTTCAGTGACATCATGGTTACCATTAGATCTCACATGCTTACTCCTTTTGGGAGGAG
AACTTAGTTTCAGCAGCTGGAGGAAGTATCTCACACCAGGTTAGCTTCTCCTACTTCAAT
GCATTTAACTCGTACTGAATAACATGGAGCTTGTTCGTAAGATATATAGCACTTAGCT
GGCACAAGGAAAGATGTTGAAGTCAAAAGGAGGAATTTGCCAGAGTGCATACGCTAT
GGACAAGTCAACCACTAGAAATGATATTCTATATCAGCTTGCAGACTTATATAATGCT
TCAGGGCGCTTGACTTTGGCAGATATTGAGAGAATAGCCCATTTGGCTGAGGGGGCCTTA
CCTTACAACCTGGCAGAACTT CAGAGACAGCAGTCTCCTGGGTTAGGCAGGCCTATCTGG
CTCCAGATTGCCGAGTCTGCTTACAGATTCACTCTGGGCTCAGTTGCTGGAGCTGTGGGA
GCCACTGCAGTGTATCCTATAGATCTGGTGAAGACCCGAATGCAAACCAGCGTGGCTCT
GGCTCTGTTGTTGGGGAGCTAATGTACAAAAACAGCTTTGACTGTTTTAAGAAAGCTTG
CCAGAAAAGGCCATTAAC TACTGACTGTTAATGATTTTGTTCGGGACAAATTTACCAGAAGA
GATGGCTCTGTTCCACTTCCAGCAGAAGTCTTGCTGGAGGCTGTGCTGGAGGCTCTCAG
GTCATTTTTACCAACCCATTGGAGATAGTGAAGATTTCGCTGCAAGTAGCTGGAGAGATC
ACCACGGGACCCAGAGT CAGCGCCCTGAATGTGCTCCGGGACTTGGGAATTTTTGGTCTG
TATAAGGGTGCCAAAGCGTGTTCCTCCGAGACATTCCTTCTCTGCAATCTATTTTCT
GTTTATGCTCATTGCAA ACTACTTCTGGCTGATGAAAATGGACACGTGGGAGGTTAAAT
CTTCTTGAGCTGGAGCCATGGCAGGTGCCAGCTGCATCTCTGGTGACCCCTGCTGAT
GTCATCAAGACAAGACTGCAGGTGGCTGCCCGCTGGCCAGACGACATACAGTGGTGTG
ATCGACTGTTTCAGGAAGATTCTCCGGGAAGAAGGGCCCTCAGCATTTTGGAAAGGGACT
GCAGCTCGAGTGTTCGATCCTCTCCCAAGTTTGGTGTTACCTTGGTCACTTATGAACTT
CTCCAGCGGTGGTTTTACATTGATTTTGGAGGCCTCAAACCCGCTGGTTCAGAACCAACA
CCTAAGTACGCATTGCAGACCTTCTCCTGCCAACCTGATCACATCGGTGGATACAGA
CTCGCCACAGCCACGTTTGCAGGCATCGAAAACAAATTTGGCCTTTATCTCCCGAAATTT
AAGTCTCTAGTGTGCTGTGGTTCAGCCAAAGGCAGCAGTGGCAGCCACTCAGTGA

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Clone variation with respect to NM\_003705.3  
99 t=>c

<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_003705 unedited</p> <pre> TAATCGACTCACTATAGGGCGGCCGCGACATTCGCACGAGGCGGGCGCGGCCGGGAAGAC GGCGCGCGCGGCCCTGACAGCTCGGCCCTGCTCGCTCACTCGCTCGTCCCCGGCTTCCG AGCACAGCATGGCGGTCAAGGTGACAGCAACTAAGCGAGGGGATCCTCATGAGTTAAGAA ACATATTTCTACAGTATGCCAGTACTGAGGTTGATGGAGAGCGTTACATGACCCAGAAG ACTTTGTTTCCAGCGCTATCTTGGACTGTATAATGATCCAAATAGTAACCCAAAGATCGTGC AGCTCTTGGCAGGAGTAGCTGATCAAACCAAGGATGGGTTGATCTCCTATCAAGAGTTTT TGGCATTGGAATCTGTTTTATGTGCTCCAGATTCCATGTTTCATAGTGGCTTTCCAGTTGT TTGACAAGAGTGGAAATGGAGAGGTGACATTTGAAAATGTCAAAGAAATTTTTGGACAGA CTATTATTCATCATCATATCCCTTTTAACTGGGATTGTGAATTTATCCGACTGCATTTTG GGCATAACCGGAAGAAGCATCTTAACTACACAGAATTCACGCAGTTTCTCCAGGAGCTGC AATTGGAACATGCAAGACAAGCCTTTGCACTCAAAGACAAGCAAAAGTGGCATGATTTT TGGTCTGGATTTTCACTGACATCATGGTTACCATTAGATCTCACATGCTTACTCCTTTTGG GGAGGAGACTTAGTTTCCAGCAGCTGGAGGAAGTATCTCACACAAAGTTAGCTNCTCCTA CTTCAATGCATTTAAACTCGTACTGAATAACATGNNAGCTTGNTCGTAAGATATATAGCA CTCTAANNCTGCAAAGGNAAGATGTTGAAGTCAAAAGNAGGAATTGGCCAAAATGCCA TACGCTATGGACAAGTCACACACTAGAAAATGAATTCTTATATACTTTG </pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_003705 unedited</p> <pre> GCTTGGACGCGGCCCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTACATTTTGGTGT GCATTTTATTTTTGACTGGAATCATATCCATATGAAGGGAATTTGTGAAAGTATCCTTTA CTTTTTGAAAGCTTGGCCTTTGCCTTACTGTGTCAAAGGAAAGCAAACTAAGCCAGTA ATGATGGAGATGCCCTGTTTCCATATGCACACTGACAGGCGAGGAGCTGCCTAGGAAAT GCTTTTTGATTGATGAACAGAGGAGGGTCTACACACATTAATACAAATGGAAACACATC AGCACACACAAGTCATTAGCCTGGTCTCTGGCATCCACTGGCATGCATCTTTCCAAAGT ATCACTTATTCAGTGGTAGCAGCACTATGTCTCGTTATGCCTTTTATCAGCAAATACCTT TTTATTCAGAATGAAAAACAACTAGGAATTAATATACCAATATTGATGCTTTATTT CCATAAGTCACCAATAAGAGAATGAATTTAATTTAATACATTTATTTTTGTGTGATTCT TAATAAAACACTTTCAAACATTCTGTACATTTCAAGCCACTCAGAACCAGCATTACATTT CTACAAATGTGATTTGTTGGGATGAGGTGCCAAGATGTCTGTACAAAGATGTACAATA TGTACAATCACTGTAAGTGCAAGCTGTGCAAAGCAGAGTCTAGAACACTAATTCATGCCA AGGCTTACANAAACATTTCAACACATAAGACTAAAGCTTGAAACAGCGTTGTGGGTTTTT TCCCTGGGCAAATGATTATNTATAAAACCAGTATATGTATATGCATACAAAAGAGAGT TTGACTCCTCAGCTCAGTCAGTACCATGCAGCTGACTGGATACATTACAGGNCTGCTCTT CTN </pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_003705
<b>Insert Size:</b>	2790 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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\\_003705.2](#), [NP\\_003696.2](#)

**RefSeq Size:** 2964 bp

**RefSeq ORF:** 2037 bp

**Locus ID:** 8604

**UniProt ID:** [O75746](#)

**Cytogenetics:** 2q31.1

**Domains:** mito\_carr, EFh

**Protein Families:** Druggable Genome

**Gene Summary:** This gene encodes a calcium-binding mitochondrial carrier protein. The encoded protein localizes to the mitochondria and is involved in the exchange of aspartate for glutamate across the inner mitochondrial membrane. Polymorphisms in this gene may be associated with autism, and mutations in this gene may also be a cause of global cerebral hypomyelination. Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, Apr 2012]

Transcript Variant: This variant (1) represents the longer transcript and is protein-coding.

Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.