

## Product datasheet for **RC204475**

### SLC25A12 (NM\_003705) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC25A12 (NM_003705) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC25A12
Synonyms:	AGC1; ARALAR; DEE39; EIEE39
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC204475 representing NM\_003705  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGGATCGCC

ATGGCGGTCAAGGTGCAGACAATAAGCGAGGGGATCCTCATGAGTTAAGAAACATATTTCTACAGTATG  
CCAGTACTGAGGTTGATGGAGAGCGTTATATGACCCAGAAAGACTTTGTTGAGCGCTATCTTGGACTGTA  
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TTGATCTCCTATCAAGAGTTTTTGGCATTGTAATCTGTTTTATGTCTCCAGATTCCATGTTTCATAGTGG  
CTTTCCAGTTGTTTGACAAGAGTGGAAATGGAGAGGTGACATTTGAAAATGTCAAAGAAATTTTGGACA  
GACTATTATTCATCATCATATCCCTTTAACTGGGATTGTGAATTTATCCGACTGCATTTTGGGCATAAC  
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TCACACCAGGTTAGCTTCTCCTACTTCAATGCATTTAACTCGTTACTGAATAACATGGAGCTTGTTCGTA  
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CATACGCTATGGACAAGTCACACCACTAGAAAATTGATATTCTATATCAGCTTGCAGACTTATATAATGCT  
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TGGCAGAACTTCAGAGACAGCAGTCTCCTGGGTTAGGCAGGCCTATCTGGCTCCAGATTGCCGAGTCTGC  
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GACATTCCTTCTGCAATCTATTTTCTGTTTATGCTCATTGCAAACTACTTCTGGCTGATGAAAATG  
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TGTTTCGATCCTCTCCCAAGTTTGGTGTACCTTGGTCACTTATGAACCTCTCCAGCGGTGGTTTTACAT  
TGATTTTGGAGGCTCAAACCCGCTGGTTCAGAACCAACACCTAAGTCACGCATTGCAGACCTTCTCCT  
GCCAACCTGATCACATCGGTGGATACAGACTCGCCACAGCCACGTTTGCAGGCATCGAAAACAAATTTG  
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TCAG

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC204475 representing NM\_003705  
Red=Cloning site Green=Tags(s)

```
MAVKVQTTKRGDPHELRNIFLQYASTEVDGERYMPEDFVQRYLGLYNDPNSNPKIVQLLAGVADQTKDG
LISYQEFLAFESVLCAPDSMFIVAFQLFDKSGNGEVTFENVKEIFGQTIHHHIPFNWDCEFIRLHFGHN
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SHQVSFSYFNANSLNLMELVRKIYSTLAGTRKDVEVTKEEFAQSAIRYGQVTPLEIDILYQLADLYNA
SGRLTLADIERIAPLAEGALPYNLAELQRQQSPGLGRPIWLQIAESAYRFTLGSVAGAVGATAVYPIDLV
KTRMQNQRGSGSVVVGELMYKNSFDCFKKVLRYEGFFGLYRGLIPQLIGVAPEKAIKLTVNDVFVRDKFTRR
DGSVPLPAEVLAGGCAGGSQVIFTNPLEIVKIRLQVAGEITTGPRVSALNVLRLDGLIFGLYKGAACFLR
DIPFSAIYFPVYAHCKLLADENGHVGLNLLAAGAMAGVPAASLVTPADVIKTRLQVAARAGQTTYSYGV
IDCFRKILREEGPSAFWKGTAAVFRSSPQFGVTLVTYELLQRWFYIDFGGLKPKGSEPTPKSRIADLPP
ANPDHIGGYRLATATFAGIENKFGLYLPKFKSPSVAVVQPKAAVAATQ
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2663\\_e01.zip](https://cdn.origene.com/chromatograms/mg2663_e01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_003705

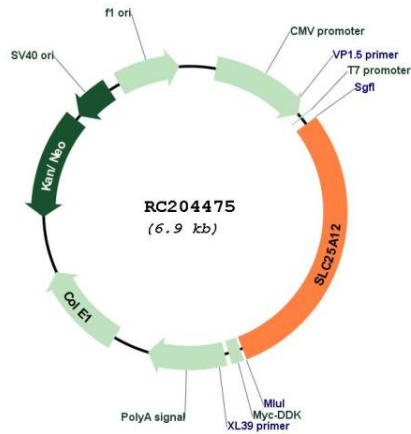
**ORF Size:** 2034 bp

**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](#)

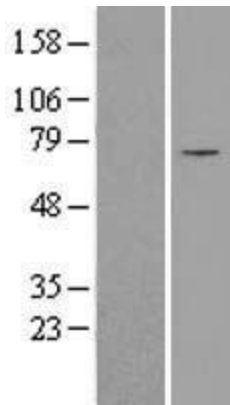
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_003705.5</a></u>
<b>RefSeq Size:</b>	2964 bp
<b>RefSeq ORF:</b>	2037 bp
<b>Locus ID:</b>	8604
<b>UniProt ID:</b>	<u><a href="#">O75746</a></u>
<b>Cytogenetics:</b>	2q31.1
<b>Domains:</b>	mito_carr, EFh
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	74.6 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for RC204475



Western blot validation of overexpression lysate (Cat# [LY401222]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204475 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).