

Product datasheet for **RG204475**

SLC25A12 (NM_003705) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SLC25A12
Synonyms:	AGC1; ARALAR; DEE39; EIEE39
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG204475 representing NM_003705
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGGTCAAGGTGCAGACAATAAGCGAGGGGATCCTCATGAGTTAAGAAACATATTTCTACAGTATG
 CCAGTACTGAGTTGATGGAGAGCGTTATATGACCCCAAGAACTTTGTTTCAGCGCTATCTTGGACTGTA
 TAATGATCCAAATAGTAACCCAAAGATCGTGCAGCTCTTGGCAGGAGTAGCTGATCAAAACCAAGGATGGG
 TTGATCTCCTATCAAGAGTTTTTGGCATTGAATCTGTTTTATGTCTCCAGATTCCATGTTTCATAGTGG
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 AAGCCTTTGCACTCAAAGACAAAAGCAAAAGTGGCATGATTCTGGTCTGGATTTCACTGACATCATGGT
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 CCCTGCTGATGTATCAAGACAAGACTGCAGGTGGCTGCCCGCTGGCCAGACGACATACAGTGGTGTC
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 GCCAACCTGATCAGTCGTTGGATACAGACTCGCCACAGCCAGTTTGCAGGCATCGAAAACAAATTTG
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 TCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

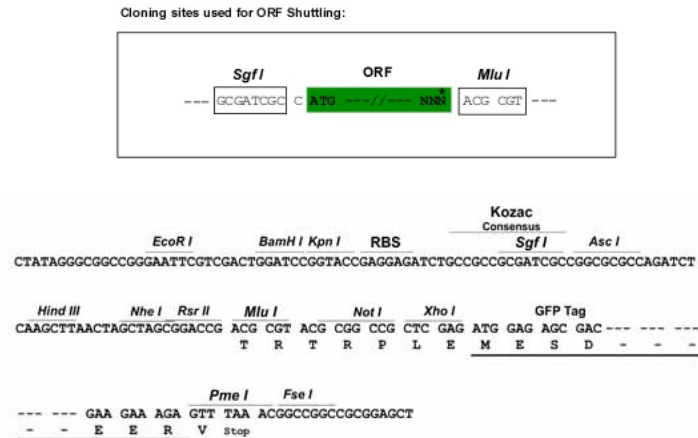
Protein Sequence: >RG204475 representing NM_003705
 Red=Cloning site Green=Tags(s)

MAVKVQTTKRGPHELNRNIFLQYASTEVDGERYMTPEDFVQRYLGLYNDPNSNPKIVQLLAGVADQTKDG
 LISYQEFALAFESVLCAPDSMFIVAFQLFDKSGNGEVTFENVKEIFGQTIHHHHPFNWDCEFIHLHFGHN
 RKKHLNYTEFTQFLQELQLEHARQAFALKDKSKSGMISGLDFSDIMVTIRSHMLTPFVEENLVSAAGGSI
 SHQVSFSYFNAFNSLLNMELVRKIYSTLAGTRKDVEVTKEEFAQSAIRYGVVTPLEIDILYQLADLYNA
 SGRLTLADIERIAPLAEGALPYNLAEQRQSPGLGRPIWLQIAESAYRFTLGSVAGAVGATAVVPIDLV
 KTRMQNQRGSGSVVGYELMYKNSFDCFKKVLRYEGFFGLYRGLIPQLIGVAPEKAIKLTVNDFVRDKFTRR
 DGSVPLPAEVLAGGCAGGSQVIFTNPLEIVKIRLQVAGEITTGPRVSALNVLRLDLGIFGLYKAKACFLR
 DIPFSAIYFPVYAHCKLLLADENGHVGLNLLAAGAMAGVPAASLVTPADVIRLQVAAARAGQTTYSGV
 IDCFRKILREEGPSAFWKGTAAARVFRSSPQFGVTLVTYELLQRWFYIDFGGLKPAGSEPTPKSRIADLPP
 ANPDHIGGYRLATATFAGIENKFLYLPKFKSPSVAVVQPKAAVAATQ

TRTRPLE - GFP Tag - V

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.

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.

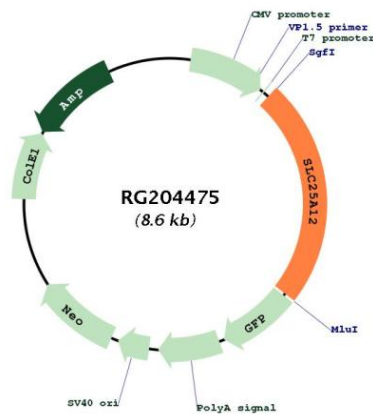
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_003705.5](#)

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]

Product images:



Circular map for RG204475