

Product datasheet for **RG225460**

SLC25A19 (NM_001126122) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC25A19 (NM_001126122) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC25A19
Synonyms:	DNC; MCPHA; MUP1; THMD3; THMD4; TPC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG225460 representing NM_001126122 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATGGTTGGCTATGACCCCAAACCAGATGGCAGGAATAACACCAAGTTCAGGTGGCAGTGGCTGGGTCTG
 TGTCTGGACTTGTTACTCGGGCGCTGATCAGTCCCTTCGACGTCATCAAGATCCGTTTCAGCTTCAGCA
 TGAGCGCCTGTCTCGCAGTGACCCAGCGCAAAGTACCATGGCATCCTCCAGGCCTCTAGGCAGATTCTG
 CAGGAGGAGGGTCCGACAGCTTTCTGAAAGGACACGTCCAGCTCAGATTCTCTCCATAGGCTATGGAG
 CTGTCCAATTCTGTCAATTTGAAATGCTGACGGAGCTGGTCCACAGAGGCAGCGTGTATGACGCCCGGA
 ATTCTCAGTGCACCTTTGTATGTGGTGGCTGGCTGCCTGTATGGCCACCCTCACTGTGCACCCCGTGGAT
 GTTCTGCGCACCCGCTTTGCAGCTCAGGGTGAGCCCAAGGTCTATAATACGCTGCGCCACGCCGTGGGA
 CCATGTATAGGAGCGAAGGCCCCAGGTTTTCTACAAAGGCTTGCTCCACCTTGATCGCCATCTTCCC
 CTACGCCGGGCTGCAGTTCTCTTGCTACAGCTCCTTGAAGCACCTGTACAAGTGGGCCATACCAGCCGAA
 GGAAAGAAAAATGAGAACCTCCAAACCTGCTTTGTGGCAGTGGAGCTGGTGTATCAGCAAGACCTGA
 CATATCCGCTGGACCTCTTCAAGAAGCGGCTACAGGTTGGAGGGTTTGGAGCATGCCAGAGCTGCCTTTGG
 CCAGGTACGGAGATACAAGGGCCTCATGGACTGTGCCAAGCAGGTGCTGCAAAAGGAAGGCGCCCTGGGC
 TTCTTCAAGGGCCTGTCCCCAGCTTGCTGAAGGCTGCCCTCTCCACAGGCTTCATGTTCTTCTCGTATG
 AATTCCTCTGTAATGTCTTCCACTGCATGAACAGGACAGCCAGCCAGCGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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Protein Sequence: >RG225460 representing NM_001126122
 Red=Cloning site Green=Tags(s)

MVGYPKPDGRNNTKFQVAVAGSVSGLVTRALISPFQVIRFQLQHERLSRSDPSAKYHGILQASRQIL
 QEEGPTAFWKGHVPAQILSIGYAVQFLSFEMLTSLVHRGSVYDAREFSVHFVCGGLAACMATLTVHPVD
 VLRTFAAQGEKPYNTLRHAVGTMYSRGPQVYKGLAPTLIAIFPYAGLQFSCYSSLKHLKYWAIPAE
 GKKNENLQNLCCSGAGVISKTLTYPLDLFKKRLQVGGFEHARAAGQVRRYKGLMDCAKQVLQKEGALG
 FFKGLSPSLLKAALSTGFMFFSYEFFCNVFHCMNRTASQR

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001126122

ORF Size: 960 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.

RefSeq: [NM_001126122.1](#), [NP_001119594.1](#)

RefSeq Size: 1585 bp

RefSeq ORF: 963 bp

Locus ID: 60386

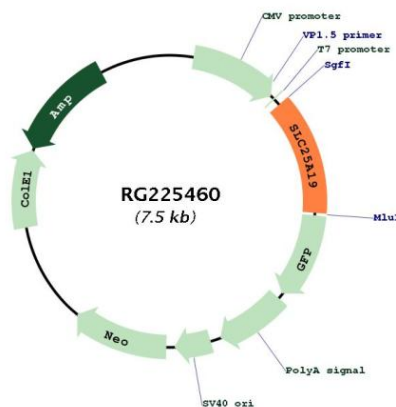
UniProt ID: [Q9HC21](#)

Cytogenetics: 17q25.1

Protein Families: Druggable Genome

Gene Summary: This gene encodes a mitochondrial protein that is a member of the solute carrier family. Although this protein was initially thought to be the mitochondrial deoxynucleotide carrier involved in the uptake of deoxynucleotides into the matrix of the mitochondria, further studies have demonstrated that this protein instead functions as the mitochondrial thiamine pyrophosphate carrier, which transports thiamine pyrophosphates into mitochondria. Mutations in this gene cause microcephaly, Amish type, a metabolic disease that results in severe congenital microcephaly, severe 2-ketoglutaric aciduria, and death within the first year. Multiple alternatively spliced variants, encoding the same protein, have been identified for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG225460