

Product datasheet for **RG216470**

SLC25A23 (NM_024103) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC25A23 (NM_024103) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC25A23
Synonyms:	APC2; MCSC2; SCaMC-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RG216470 representing NM_024103
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATCGGGGGAGCCCGGGGACGCGGAGCGCGGACGCGTGGGGTCGCTGTTTCGAGGAGCTGGACAGTA
 ACAAGGATGGCCCGTGGACGTGCACGAGTTGCGCCAGGGGCTGGCCAGGCTGGCGGGGCAACCCAGA
 CCCCAGCGCCCAACAGGGTATCTCCTCTGAGGGTGATGCTGACCCAGATGGCGGGCTCGACCTGGAGGAA
 TTTTCCGCTATCTGCAGGAGCGGGAACAGCGTCTGCTGCTCATGTTTCACAGTCTTGACCGGAACAGG
 ATGGTCACATTGATGTCTCTGAGATCCAACAGAGTTTCCGAGCTCTGGGCATTTCCATCTCGCTGGAGCA
 GGCTGAGAAAATTTGCACAGCATGGACCGAGACGGCACAATGACCATTGACTGGCAAGAATGGCGCGAC
 CACTTCTGTTCATTTCGCTGGAATGTGGAGGACGTGCTGATTTCTGGAAGCATTCCACGGTCTGG
 ACATTGGCGAGTGCCTGACAGTGCCGGACGAGTTCTCAAAGCAAGAGAAGCTGACGGGCATGTGGTGAA
 ACAGCTGGTGGCGGCGCAGTGCCAGTGCCGTGTACGGACAGGCACGGCCCTCTGGACCGCCTCAAG
 GTCTTCATGCAGGTCCATGCCTCAAAGACCAACCGGCTGAACATCCTTGGGGGGCTTCGAAGCATGGTCC
 TTGAGGGAGGCATCCGCTCCCTGTGGCGCGGCAATGGTATTAATGTAAGTATGCCCCGAGTCAGC
 TATCAAGTTTCATGGCCTATGAACAGATCAAGAGGGCCATCTGGGGCAGCAGGAGACACTGCATGTGCAG
 GAGCGCTTCGTGGCTGGCTCCCTGGCTGGTGCCACAGCCCAAACCATCATTTACCTATGGAGGTGCTGA
 AGACGCGGCTGACCTTGGCGCGGACGGGCCAGTATAAGGGGCTGCTGGACTGCGCCAGGCGTATCCTGGA
 GAGGGAGGGGCCCCGTGCCTTCTACCGCGGCTACCTCCCCAACGTGCTGGGCATCATCCCTATGCGGGC
 ATCGACCTGGCCGTCTACGAGACTCTGAAGAACTGGTGGCTTACGAGTACAGCCAGCACTCGGCAGACC
 CAGGCATCCTCGTCTCCTGGCTGCGGTACCATATCCAGCACCTGCGGCCAGATAGCCAGTTACCCGCT
 GGCCCTGGTCCGGACCCGCATGCAGGCACAAGCCTCCATCGAGGGTGGCCCCAGCTGTCCATGCTGGGT
 CTGCTACGTACATCCTGTCCCAGGAGGCATGCGGGGCTCTACCGGGGATCGCCCCAACTTCATGA
 AGGTTATTCAGCTGTGAGCATCTCCTATGTGGTCTACGAGAACATGAAGCAGGCCTTGGGGGTACGTC
 CAGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG216470 representing NM_024103
 Red=Cloning site Green=Tags(s)

MRGSPGDAERRQRWGRLEELDSNKGDRVDVHELRLQGLARLGGGNPDPGAQQGISSEGDADPDGGLDLEE
 FSRYLQEREQRLLLMFHSLDRNQDGHIDVSEIQSFRLGISISLEQAELHSMRDGTMIDWQEWDR
 HFLLHSLNVEDVLYFWKHSTVLDIGECLTVPDEFKQEKLTGMWWKQLVAGAVAGAVSRTGTAPLDRLK
 VFMQVHASKTNRLNILGGLRSMVLEGGIRSLWRNGINVLKIAPESAIKFMAYEQIKRAILGQETLHVQ
 ERFVAGSLAGATAQTIIYPMEVLKTRLTLRRTGQYKGLLDCARRILEREPRAFYRGYLPNVLGIIPYAG
 IDLAVYETLKNWWLQQYSHDSADPGILVLLACGTISSTCGQIASYPLALVRTRMQAASIEGGPQLSMLG
 LLRHILSQEGMRGLYRGIAPNFMKVIPAVSISYVVYENMKQALGVTSR

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_024103

ORF Size: 1404 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_024103.3](#)

RefSeq Size: 3475 bp

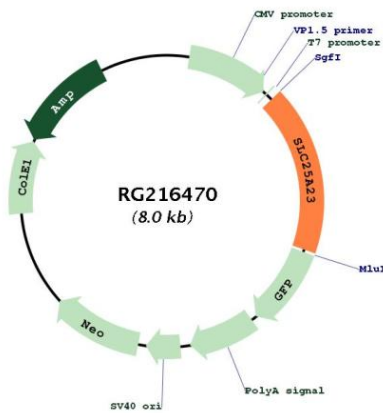
RefSeq ORF: 1407 bp

Locus ID: 79085

UniProt ID: [Q9BV35](#)

Cytogenetics:	19p13.3
Domains:	mito_carr, EFh
Protein Families:	Druggable Genome
Gene Summary:	Calcium-dependent mitochondrial solute carrier. Mitochondrial solute carriers shuttle metabolites, nucleotides, and cofactors through the mitochondrial inner membrane (PubMed:15123600). May act as a ATP-Mg/Pi exchanger that mediates the transport of Mg-ATP in exchange for phosphate, catalyzing the net uptake or efflux of adenine nucleotides into or from the mitochondria (PubMed:15123600). Acts as a regulator of mitochondrial calcium uptake via interaction with MCU and MICU1 (PubMed:24430870).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG216470