

Product datasheet for **RG218413**

SLC25A37 (NM_016612) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SLC25A37
Synonyms:	HT015; MFRN; MFRNI; MSC; MSCP; PRO1278; PRO1584; PRO2217
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG218413 representing NM_016612
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCTGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCTGCGCAGCGGGAGCGTGGGCAGCCAGGCGGTGGCGCGGAGGATGGATGGGGACAGCCGAGATG
GCGGCGGGCGCAAGGACGCCACCGGGTCGGAGGACTACGAGAACCTGCCGACTAGCGCCTCCGTGTCCAC
CCACATGACAGCAGGAGCGATGGCCGGGATCCTGGAGCACTCGGTTCATGTACCCGGTGGACTCGGTGAAG
ACACGAATGCAGAGTTTGAGTCCAGATCCCAAAGCCCAGTACACAAGTATCTACGGAGCCCTCAAGAAAA
TCATGCGGACCGAAGGCTTCTGGAGGCCCTTGCAGGCGTCAACGTTCATGATCATGGGTGCAGGGCCGGC
CCATGCCATGTATTTTGCCTGTATGAAAACATGAAAAGGACTTTAAATGACGTTTTCCACCACCAAGGA
AACAGCCACCTAGCCAACGGGATAGCTGGGAGTATGGCCACCCTGCTCCAGATGCGGTAATGAATCCAG
CAGAAGTGGTGAAGCAGCGCTTGACAGTGTAACTCGCAGCACCAGTCAATCAGCTGCATCCGGAC
GGTGTGGAGACCGAGGGGTTGGGGCCTTCTACCGGAGCTACACCACGAGCTGACCATGAACATCCCC
TTCCAGTCCATCCACTTCATCACCTATGAGTTCCTGCAGGAGCAGGTCAACCCCAACCGGACCTACAACC
CGCAGTCCCACATCATCTCAGGCGGGCTGGCCGGGGCCCTCGCCGCGGCCGCCACGACCCCTGGAGCT
CTGTAAGACCCTTCTGAACACTCAGGAGAACGTGGCCCTCTCGTGGCCAACATCAGCGGCCGCTGTG
GGTATGGCCAATGCCTTCCGGACGGTGTACCAGCTCAACGGCTGGCCGGCTACTTCAAAGGCATCCAGG
CGCGTGTCTATACCAGATGCCCTCCACGCCATTTCTTGGTCTGTCTATGAGTTCTCAAGTACTTTCT
CACCAAGCGCCAGCTGAAAAATCGAGCTCCATAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG218413 representing NM_016612
Red=Cloning site Green=Tags(s)

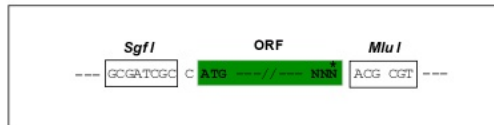
MELRSGSVGSQAVARRMDGDSRDGGGKDATGSEDYENLPTSASVSTHMTAGAMAGILEHSVMYPVDSVK
TRMQSLSPDPKAQYTSIYGALKKIMRTEGFWRLRGVNMIMGAGPAHAMYFACYENMKRTLNDVFHHQG
NSHLANGIAGSMATLLHDAVMNPAEVVKQRLQMYNSQHRSAISCIRTVWRTEGLGAFYRSYTTQLTMNIP
FQSIHFITYEFLQEVPNPHRTYNPQSHIISGGLAGALAAAATPLDVCKTLLNTQENVALSLANISGRSL
GMANAFRTVYQLNGLAGYFKGIQARVIYQMPSTAISWSVYEFFKYFLTKRQLENRAPY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGCTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC - - - -

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - - -

--- GAA GAA AGA GTT TAA ACGGCCGGCCGGAGCT

- - E E R V Stop

ACCN: NM_016612

ORF Size: 1014 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_016612.4](#)

RefSeq Size: 1865 bp

RefSeq ORF: 1017 bp

Locus ID: 51312

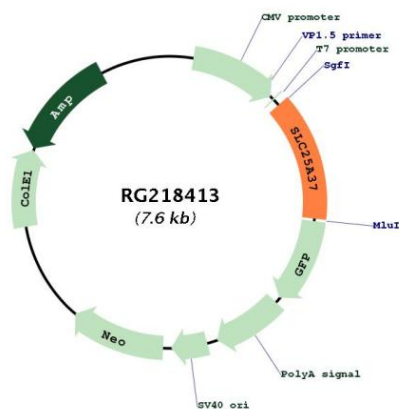
UniProt ID: [Q9NYZ2](#)

Cytogenetics: 8p21.2

Domains: mito_carr

Gene Summary: SLC25A37 is a solute carrier localized in the mitochondrial inner membrane. It functions as an essential iron importer for the synthesis of mitochondrial heme and iron-sulfur clusters (summary by Chen et al., 2009 [PubMed 19805291]).[supplied by OMIM, Jan 2011]

Product images:



Circular map for RG218413