

## Product datasheet for **RG200234**

### SLC25A20 (NM\_000387) Human Tagged ORF Clone

#### Product data:

|                           |                                                                             |
|---------------------------|-----------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                         |
| Product Name:             | SLC25A20 (NM_000387) Human Tagged ORF Clone                                 |
| Tag:                      | TurboGFP                                                                    |
| Symbol:                   | SLC25A20                                                                    |
| Synonyms:                 | CAC; CACT                                                                   |
| Mammalian Cell Selection: | Neomycin                                                                    |
| Vector:                   | pCMV6-AC-GFP (PS100010)                                                     |
| E. coli Selection:        | Ampicillin (100 ug/mL)                                                      |
| ORF Nucleotide Sequence:  | >RG200234 representing NM_000387<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCCGACCAGCCAAAACCCATCAGCCCGCTCAAGAACCTGCTGGCCGGCGGCTTTGGCGGCGTGTGCC  
 TGGTGTTCTGTCGGTCACCTCTGGACACGGTCAAGGTCCGACTGCAGACACAGCCACCGAGTTTGCCTGG  
 ACAACCTCCCATGTACTCTGGGACCTTTGACTGTTCCGGAAGACTCTTTTAGAGAGGGCATCACGGG  
 CTATATCGGGGAATGGCTGCCCTATCATCGGGGTCACTCCCATGTTGCCGTGTGCTTCTTTGGGTTTG  
 GTTTGGGAAGAACTACAACAGAAACACCCAGAAGATGTGCTCAGCTATCCCCAGCTTTTGCAGCTGG  
 GATGTTATCTGGCGTATTCACCACAGGAATCATGACTCCTGGAGAACGGATCAAGTGCTTATTACAGATT  
 CAGGCTTCTTCAGGAGAAAGCAAGTACACTGGTACCTTGGACTGTGCAAAGAAGCTGTACCAGGAGTTTG  
 GGATCCGAGGCATCTACAAAGGGACTGTGCTTACCCTTATGCGAGATGTCCAGCTAGTGAATGTATTT  
 CATGACATATGAATGGCTGAAAAATATCTTCACTCCGAGGGGAAAGAGGGTCAGTGAGCTCAGTGCCCT  
 CGGATCTTGGTGGCTGGGGCATTGCAGGGATCTCACTGGGCTGTGGCAATCCCCCAGATGTGCTCA  
 AGTCTCGATTCCAGACTGCACCTCCTGGGAAATATCCTAATGGTTTCAGAGATGTGCTGAGGGAGCTGAT  
 CCGGGATGAAGGAGTCACATCCTTGTACAAAGGGTTCAATGCAGTGATGATCCGAGCCTCCAGCCCAAT  
 GCGGCTGTTTCTTGGCTTTGAAGTTGCCATGAAGTTCCTTAATTGGGCCACCCCAACTTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA


[View online »](#)

**Protein Sequence:** >RG200234 representing NM\_000387  
 Red=Cloning site Green=Tags(s)

MADQPKPISPLKNLLAGGFGGVCLVFVGHPLDTVKVRLQTQPPSLPGQPPMYSGTFDCFRKTLFREGITG  
 LYRGMAAPIIGVTPMFAVCFFGFGLGKKLQQKHPEDVLSYPQLFAAGMLSGVFTTGIMTPGERIKCLLQI  
 QASSGESKYTGTLDCAKKLYQEFGIRGIYKGTVLTLMRDVPASGMFYMTYEWLNIFTPEGKRVSELSAP  
 RILVAGGIAGIFNWAIPAIPDVLKSRFQTAPPGKYPNGFRDVLRELIRDEGVTSLYKGFNAVMIRAFPAN  
 AACFLGFEVAMKFLNWATPNL

TRTRPLE – GFP Tag – V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_000387

**ORF Size:** 903 bp

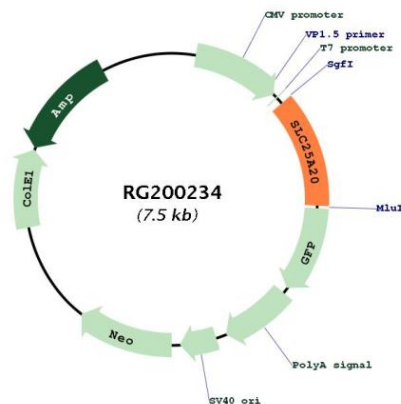
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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>Note:</b>                  | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>RefSeq:</b>                | <u>NM_000387.6</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>RefSeq Size:</b>           | 1803 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>RefSeq ORF:</b>            | 906 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Locus ID:</b>              | 788                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>UniProt ID:</b>            | <u>Q43772</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Cytogenetics:</b>          | 3p21.31                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Domains:</b>               | mito_carr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Protein Families:</b>      | Druggable Genome, Transmembrane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Gene Summary:</b>          | <p>This gene product is one of several closely related mitochondrial-membrane carrier proteins that shuttle substrates between cytosol and the intramitochondrial matrix space. This protein mediates the transport of acylcarnitines into mitochondrial matrix for their oxidation by the mitochondrial fatty acid-oxidation pathway. Mutations in this gene are associated with carnitine-acylcarnitine translocase deficiency, which can cause a variety of pathological conditions such as hypoglycemia, cardiac arrest, hepatomegaly, hepatic dysfunction and muscle weakness, and is usually lethal in new born and infants. [provided by RefSeq, Jul 2008]</p> |

## Product images:



Circular map for RG200234