

## Product datasheet for **RC229251**

### SEPSECS (NM\_153825) Human Tagged ORF Clone

#### Product data:

|                    |   |
|--------------------|---|
| Product Type:      | Expression Plasmids   |
| Product Name:      | SEPSECS (NM_153825) Human Tagged ORF Clone  |
| Tag:               | Myc-DDK   |
| Symbol:            | SEPSECS   |
| Synonyms:          | LP; MGC161491; Sep (O-phosphoserine) tRNA:Sec (selenocysteine) tRNA synthase; SLA; SLA/LP; soluble liver antigen/liver pancreas antigen |
| Vector:            | pCMV6-Entry (PS100001)  |
| E. coli Selection: | Kanamycin (25 ug/mL)  |
| Cell Selection:    | Neomycin  |



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**ORF Nucleotide Sequence:**

>RC229251 representing NM\_153825  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAACCGCGAGAGCTTCGCGCGGGAGAGCGGCTGGTGTGCGCCGGCTTACGTGCGGCAGGGCTGTGAGG  
 CCCGCCGCTCGCATGAGCACCTCATACGGCTGCTTCTGGAGAAGGGCAAGTGTCCAGAGAATGGCTGGGA  
 TGAAAGTACACTTGAACCTTTTTACATGAACTTGCAATCATGGACAGCAACAATTTCTTAGCAATTGT  
 GGTGTGGGAGAAAGGGAAGGGAGAGTGGCATCCGCACTGGTTGCTCGTCGTCATTACAGGTTCAATCATG  
 GCATTGGACGATCCGGTGATATTTCTGTGTGCAACCAAAAGCTGCAGGCTCTAGCCTTTTGAACAAAAT  
 TACCAATCTTTGGTCTGGACATTATAAAGCTGGCTGGTGTCCATACAGTAGCCAACCTGCTTTGTAGTT  
 CCTATGGCAACTGGTATGAGTCTAACTCTGTGTTCTTAAACATTACGACACAAAAGACCAAGGCAAAGT  
 ATATTATATGGCCACGAATAGACCAGAAGTCTGCTTTAAATCCATGATCACTGCAGGTTTTGAGCCTGT  
 GGTGATAGAAAATGTTTTGGAAGGTGACGAGCTGCGTACAGACCTGAAAGCAGTGGAGGCTAAAGTCCAG  
 GAACCTGGGCCTGATTGCATTCTGTGTATTCTACTACTACATCTGTTTTGCTCCAAGGGTGCCTGATA  
 GATTAGAAGAAGTGGCTGTGATTTGTGCTAATTATGACATTCCACATATAGTTAATAATGCTTATGGAGT  
 GCAGTCTTCAAAGTGATGCATCTCATTAGCAGGGGGCTCGAGTTGGTAGAATAGATGCTTTTGTTCAG  
 AGCTTGGACAAAAATTTATGGTCCAGTAGGTGGTGTATAATTGCTGGCTTTAATGATTCATTCATTC  
 AGGAAATCAGCAAGATGTATCCAGGAAGAGCTTCAGCTTCACCTCTTTAGATGCCTTATTACTTTATT  
 GTCACCTGGATCAAATGGCTATAAGAAGCTACTAAAAGAAAGAAAGGAAATGTTTTCATATTTGTCCAAC  
 CAAATAAAGAAGTTGTCAGAAGCCTACAATGAAAGACTGTTGCATACACCTCACAAATCCCATATCTTTAG  
 CTATGACACTTAAACACTAGATGAACACCGTGACAAAGCTGTCACTCAGCTTGGCTCGATCTTTTAC  
 CAGACAGGTTTTCTGGAGCCAGGGTTGTGCTCTTGGGTCCATGCAAAGTGTGAGTGGCTATACTTTACAG  
 GGCTTTATGTCACATACAAATAATTACCCTTGTGCTTACCTCAATGCTGCATCAGCCATCGGAATGAAGA  
 TGCAGGATGTGGACCTGTTATAAAGAGACTTGACAGGTGTTAAAGGCAGTAAGAAAAGAACGAAGTAA  
 AGAGAGTGATGACAATTATGACAAAAGTGAAGATGTGGATATTGAAGAAATGGCTTTAAACTAGATAAT  
 GTACTTCTTGACACATACCAGGATGCTTCTTCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC229251 representing NM\_153825  
 Red=Cloning site Green=Tags(s)

MNRESFAAGERLVSPAYVRQCEARRSHEHLIRLLLEKKGKCPENGWDESTLELFLHELAIMDSNNFLGNC  
 GVGEREGRVASALVARRHYRFIHGIGRSGDISAVQPKAAGSSLLNKITNSLVLDIIKLAGVHTVANCFV  
 PMATGMSLTLCFLTLRHKRPKAKYIIWPRIDQKSCFKSMITAGFEPVVIENVLEGDELRTDLKAVEAKVQ  
 ELGPDICILCIHSTTSCFAPRVPDRLEELAVICANYDIPHIYVNNAYGVQSSKCMHLIQQGARVGRIDAFVQ  
 SLDKNFMVPVGGAIAGFNDSFIQEISKMYPGRASASPSLDVLIITLLSLGSDNGYKLLKERKEMFSYLSN  
 QIKKLSEAYNERLLHTPHNPISLAMTLKTLDEHRDKAVTQLGSMFLTRQVSGARVPLGSMQTVSGYTFR  
 GFMSHTNNYPAYLNAASAIGMKMQDVLFIKRLDRCLKAVRKERSKESDDNYDKTEDVDIEEMALKLDN  
 VLLDITYQDASS

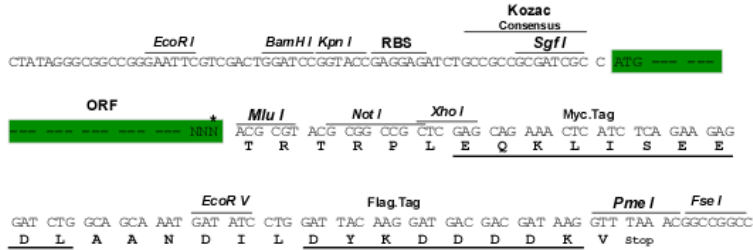
**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-Mlul

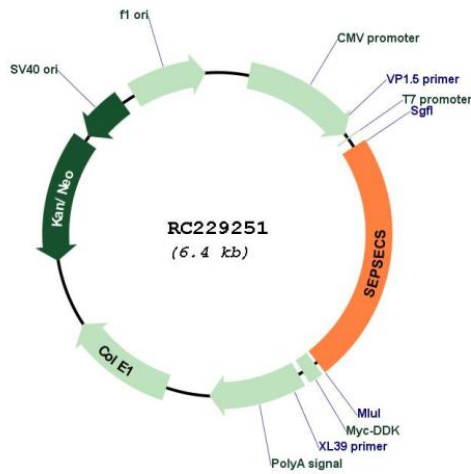
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



|                               |   |
|-------------------------------|---|
| <b>ACCN:</b>                  | NM_153825   |
| <b>ORF Size:</b>              | 1503 bp   |
| <b>OTI Disclaimer:</b>        | 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. <a href="#">More info</a>  |
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.  |
| <b>Components:</b>            | 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>RefSeq:</b>                | <a href="#">NM_153825.2</a> , <a href="#">NP_722547.2</a>   |
| <b>RefSeq ORF:</b>            | 1505 bp   |
| <b>Locus ID:</b>              | 51091   |
| <b>Cytogenetics:</b>          | 4p15.2  |
| <b>Protein Pathways:</b>      | Aminoacyl-tRNA biosynthesis   |
| <b>MW:</b>                    | 56.2 kDa  |
| <b>Gene Summary:</b>          | The amino acid selenocysteine is the only amino acid that does not have its own tRNA synthetase. Instead, this amino acid is synthesized on its cognate tRNA in a three step process. The protein encoded by this gene catalyzes the third step in the process, the conversion of O-phosphoseryl-tRNA(Sec) to selenocysteinyl-tRNA(Sec).[provided by RefSeq, Mar 2011]  |