

## Product datasheet for **RC208306**

### **SARS2 (NM\_017827) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	SARS2 (NM_017827) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SARS2
Synonyms:	mtSerRS; SARS; SARSM; SerRS; SerRSmt; SERS; SYS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC208306 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTGCGTCCATGGCGGGCGCTTGTGGCCTTTGCTGACTCGTCGGGGTTCCGGCCCCGGGAGGCT  
 GCATCTCCAACGATAGTCCAAGGAGAAGTTTCACTACAGAGAAAACGAAACCGGAACCTCCTGTACGAGTA  
 TGC GCGGAGGGCTACAGCGCACTCCCTCAGCTGGACATAGAGCGGTTCTGCGCATGCCAGAAAGAGGCC  
 GCACACGCCCTGGAGCTCCGCAAGGGGGAGCTGCGCTCGGCGGACCTGCCCGCATCATCTCGACATGGC  
 AGGAGCTGAGGCAGTGCAGGAGCAGATCCGGAGCCTGGAGGAAGAGAAGGCAGCTGTGACTGAGGCAGT  
 GCGGGCCCTGCTGGCAAACAGGACAGTGGTGAAGTGCAGCAGGACCCCAAGTACCAGGGTCTGCGGGCA  
 CGTGGCCGGGAGATCCGGAAGGAGCTTGTTCACCTGTACCCAGGGAGGCCAGCTTGAGGAGCAGTTCT  
 ACCTGCAGGCGCTGAAGCTGCCAACCAGACCCACCCAGAGCTGCCCGTGGGGATGAGAGCCAGGCTCG  
 AGTGCTCCACATGGTCGGAGACAAGCCAGTTTTCTCCTTCCAACCTCGGGCCACCTGGAATTGGCGAG  
 AAACCTCGACATCATCCGTGAGAAGCGCCTGTCCCACGTGTCTGGCCACCGGTCTATTACCTGCGCGGGG  
 CTGGAGCCCTCCTGCAGCACGGCCTGGTCAACTTCAATTCAACAAGCTTCTCCGCCGGGGCTTACCCCC  
 CATGACGGTGCCAGACCTTCTCCGCGGAGCAGTGTGTAAGGCTGTGGGATGACACCAAATGCCAACCA  
 TCCCAAATTTACAACATCGACCTGCCCGCTTCAAAGATCTCAACCTGGCTGGAACAGCGGAGGTGGGGC  
 TTGCAGGCTACTTTCATGGACCACCCGTGGCCTTCAGGGACCTGCCAGTCAGGATGGTTTGTCCAGCAC  
 CTGCTACCGGGCAGAGACAAACAGGGACAGGAACCCCGGGGGCTGTATCGAGTACACCATTACCAAG  
 GTGGAGATGTTTGGGGTACAGGCCCTGGGCTGGAGCAGAGCTCACAGCTGCTGGAGGAGTTCTGTCCC  
 TTCAGATGGAGATCTTGACAGAGCTGGGCTTGCACCTCCGGGCTCTGGATATGCCACCAAGAAGCTGGG  
 CCTCCCCGCTACCGCAAGTTTGACATTGAGGCCTGGATGCCAGGCCGAGGCCGCTTTGGAGAGGTCACC  
 AGTGCTTCCAACCTGCACAGACTTCCAGAGCCGCCCTCCACATCATGTTCCAGACCGAGGCTGGGAGC  
 TGCAGTTTGGCCATACGGTGAACGCCACCGCCTGTGCTGTCCCCGCCTTCTCATCGCGCTCCTGGAGAG  
 TAACCAGCAGAAGGACGGCTCAGTGCTCGTCCCCCTGCCCTCCAGTCTACCTCGGCACTGATCGGATC  
 ACAGCCCTACCCAGTGCCTCTCCAGTACATCGGCCCAACCAGCCCCGGAAGCCTGGGCTGCCTGGCC  
 AGCCTGCTGTAAGC

**ACGCGT**ACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC208306 protein sequence  
 Red=Cloning site Green=Tags(s)

MAASMARRLWPLLTRRGFRPRGGCISNDSPRRSFTTEKRNRLLEYAREGYSALPQLDIERFCACPEEA  
 AHALELRKGLRSADLPAAIISTWQELRQLQEQIRLSLEEEKAAVTEAVRALLANQDSGEVQDPKYQGLRA  
 RGREIRKELVHLYPREAQLLEEQFYQLQALKLPNQTHPDVPVGDSEQARVLHMVGDKPVFSFQPRGHLEIGE  
 KLDIIRQKRLSHVSGHRSYYLRGAGALLQHGLVNFVFNKLLRRGFTPMTVPDLLRGAVFEGCGMTPNANP  
 SQIYNIDPARFKDLNLAGTAEVGLAGYFMDHTVAFRDLVPRMVCSSSTCYRAETNTQEPRLYRVHHTK  
 VEMFGVTGPGLEQSSQLLEEFSLQMEILTEGLHFRVLDMPQTQELGLPAYRKFDIEAWMPGRGRFGEVT  
 SASNCTDFQSRRLHIMFQTEAGELQFAHTVNATACAVPRLLIALLESNQKDGSVLVPPALQSYLGTDRI  
 TAPTHVPLQYIGPNQPRKPLPGQPAVS

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6552\\_f05.zip](https://cdn.origene.com/chromatograms/mk6552_f05.zip)

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_017827

ORF Size: 1554 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\\_017827.4](#)

RefSeq Size: 2077 bp

RefSeq ORF: 1557 bp

Locus ID: 54938

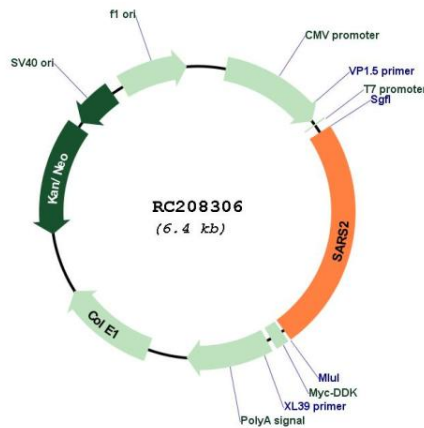
UniProt ID: [Q9NP81](#)

Cytogenetics: 19q13.2

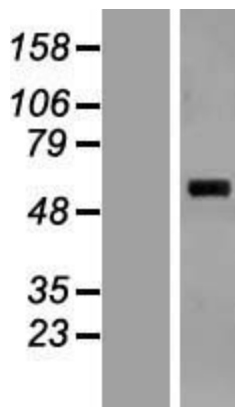
**Domains:** tRNA-synt\_2b  
**Protein Pathways:** Aminoacyl-tRNA biosynthesis  
**MW:** 58.3 kDa

**Gene Summary:** This gene encodes the mitochondrial seryl-tRNA synthetase precursor, a member of the class II tRNA synthetase family. The mature enzyme catalyzes the ligation of Serine to tRNA(Ser) and participates in the biosynthesis of selenocysteinyl-tRNA(sec) in mitochondria. The enzyme contains an N-terminal tRNA binding domain and a core catalytic domain. It functions in a homodimeric form, which is stabilized by tRNA binding. This gene is regulated by a bidirectional promoter that also controls the expression of mitochondrial ribosomal protein S12. Both genes are within the critical interval for the autosomal dominant deafness locus DFNA4 and might be linked to this disease. Multiple transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Mar 2009]

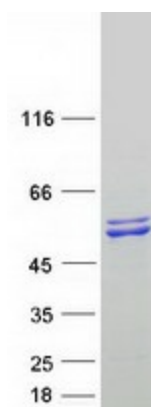
**Product images:**



Circular map for RC208306



Western blot validation of overexpression lysate (Cat# [LY413512]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208306 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SARS2 protein (Cat# [TP308306]). The protein was produced from HEK293T cells transfected with SARS2 cDNA clone (Cat# RC208306) using MegaTran 2.0 (Cat# [TT210002]).