OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC228425

SARS2 (NM_001145901) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SARS2 (NM_001145901) 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)

View online »

ORF Nucleotide Sequence:

>RC228425 representing NM_001145901
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGCGTCCATGGCGCGGCGCTTGTGGCCTTTGCTGACTCGTCGGGGGTTCCGGCCCCGGGGAGGCT
GCATCTCCAACGATAGTCCAAGGAGAAGTTTCACTACAGAGAAACGAAACCGGAACCTCCTGTACGAGTA
TGCGCGCGAGGGCTACAGCGCACTCCCTCAGCTGGACATAGAGCGGTTCTGCGCATGCCCAGAAGAGGCC
GCACACGCCCTGGAGCTCCGCAAGGGGGAGCTGCGCTCGGCGGACCTGCCCGCGATCATCTCGACATGGC
AGGAGCTGAGGCAGCTGCAGGAGCAGATCCGGAGCCTGGAGGAAGAGAAGGCAGCTGTGACTGAGGCAGT
GCGGGCCCTGCTGGCAAACCAGGACAGTGGTGAAGTGCAGCAGGTGCGGCTGGATCCAGGTGCTGGCTCC
ATATTTGGTCCTACGTTCCTCCCATTCCCAGGCCAGCTTTCTCTCCTTGTGGAGGCCCAGCTTGAGGAGC
AGTTCTACCTGCAGGCGCTGAAGCTGCCCAACCAGACCCACCCAGACGTGCCCGTCGGGGATGAGAGCCA
GGCTCGAGTGCTCCACATGGTCGGAGACAAGCCAGTTTTCTCCTTCCAACCTCGGGGCCACCTGGAAATT
GGCGAGAAACTCGACATCATCCGTCAGAAGCGCCTGTCCCACGTGTCTGGCCACCGGTCCTATTACCTGC
GCGGGGCTGGAGCCCTCCTGCAGCACGGCCTGGTCAACTTCACATTCAACAAGCTTCTCCGCCGGGGCTT
CACCCCCATGACGGTGCCAGACCTTCTCCGCGGAGCAGTGTTTGAAGGCTGTGGGATGACACCAAATGCC
AACCCATCCCAAATTTACAACATCGACCCTGCCCGCTTCAAAGATCTCAACCTGGCTGGAACAGCGGAGG
TGGGGCTTGCAGGCTACTTCATGGACCACACCGTGGCCTTCAGGGACCTGCCAGTCAGGATGGTTTGCTC
CAGCACCTGCTACCGGGCAGAGACAAACACGGGACAGGAACCCCGGGGGCTGTATCGAGTACACCACTTC
ACCAAGGTGGAGATGTTTGGGGTGACAGGCCCTGGGCTGGAGCAGAGCTCACAGCTGCTGGAGGAGTTCC
TGTCCCTTCAGATGGAGATCTTGACAGAGCTGGGCTTGCACTTCCGGGTCCTGGATATGCCCACCCAAGA
ACTGGGCCTCCCCGCCTACCGCAAGTTTGACATTGAGGCCTGGATGCCAGGCCGAGGCCGCTTTGGAGAG
GTCACCAGTGCTTCCAACTGCACAGACTTCCAGAGCCGCCGCCTCCACATCATGTTCCAGACCGAGGCTG
GGGAGCTGCAGTTTGCCCACACGGTGAACGCCACCGCCTGTGCTGTCCCCCGCCTTCTCATCGCGCTCCT
GGAGAGTAACCAGCAGAAGGACGGCTCAGTGCTCGTGCCCCCTGCCCTCCAGTCCTACCTCGGCACTGAT
CGGATCACAGCCCCTACCCACGTGCCTCTCCAGTACATCGGCCCCAACCAGCCCCGGAAGCCTGGGCTGC
CTGGCCAGCCTGCTGTAAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC228425 representing NM_001145901
Red=Cloning site Green=Tags(s)

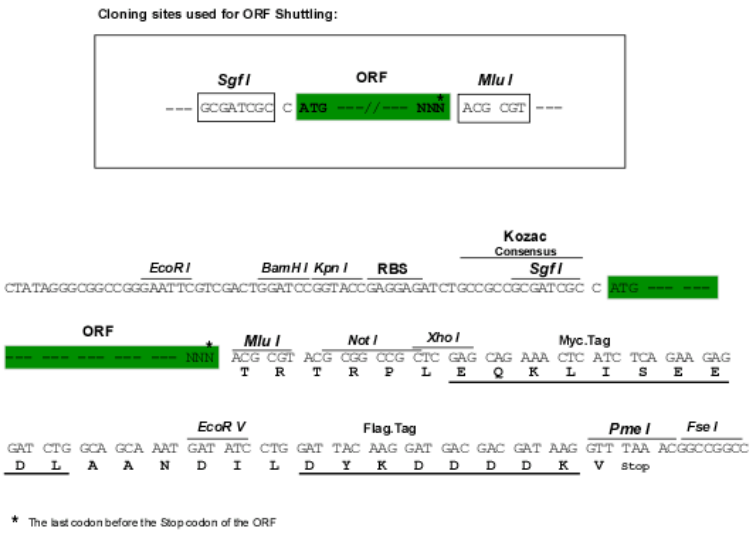
MAASMARRLWPLLTRRGFRPRGGCISNDSPRRSFTTEKRNRNLLYEYAREGYSALPQLDIERFCACPEEA
AHALELRKGELRSADLPAIISTWQELRQLQEQIRSLEEEKAAVTEAVRALLANQDSGEVQQVRLDPGAGS
IFGPTFLPFPGQLSLLVEAQLEEQFYLQALKLPNQTHPDVPVGDESQARVLHMVGDKPVFSFQPRGHLEI
GEKLDIIRQKRLSHVSGHRSYYLRGAGALLQHGLVNFTFNKLLRRGFTPMTVPDLLRGAVFEGCGMTPNA
NPSQIYNIDPARFKDLNLAGTAEVGLAGYFMDHTVAFRDLPVRMVCSSTCYRAETNTGQEPRGLYRVHHF
TKVEMFGVTGPGLEQSSQLLEEFLSLQMEILTELGLHFRVLDMPTQELGLPAYRKFDIEAWMPGRGRFGE
VTSASNCTDFQSRRLHIMFQTEAGELQFAHTVNATACAVPRLLIALLESNQQKDGSVLVPPALQSYLGTD
RITAPTHVPLQYIGPNQPRKPGLPGQPAVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8065_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001145901

ORF Size: 1560 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_001145901.2

RefSeq ORF: 1563 bp

Locus ID: 54938

UniProt ID: Q9NP81

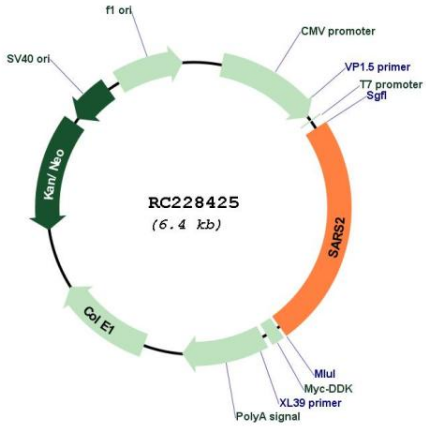
Cytogenetics: 19q13.2

Protein Pathways: Aminoacyl-tRNA biosynthesis

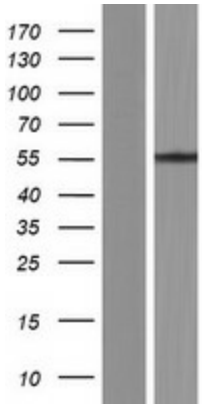
MW: 58.03 kDa

Gene Summary: This gene encodes the mitochondrial seryl-tRNA synthethase 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 RC228425



Western blot validation of overexpression lysate (Cat# [LY431453]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228425 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).