

Product datasheet for **MG220183**

Sars (NM_011319) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sars (NM_011319) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sars
Synonyms:	Sars1; serRS; Strs
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG220183 representing NM_011319
 Red=Cloning site Blue=ORF Green=Tags(s)
 TTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGTCTGGACCTGGATTTGTTTCGGGTGGATAAAGGAGGGACCCAGCCCTCATTTCGAGAGACGCAGG
 AGAAGCGCTTCAAGGACCCGGGCTGGTGGACCAGCTGGTAAAGCAGACAGTGAGTGGCGACGATGCAG
 ATTTCCGGCAGACAACCTGAACAAGCTGAAGAATTTATGCAGCAAACTATTGGGAGAAAAATGAAGAAA
 AAGGAAGCAGTGGGAGACGACGAGTCCGTCAGAGAACGTGCTGAATTCGATGACCTCACTGCAGACG
 CGCTAGCTGCCCTGAAAGTCTCACAGATTAAGGAGTCCGACTCCTCATTGATGAAGCCATCCAGAAGTG
 TGATGGGAGCGGGTAAAGCTGGAAGCAGAGCGATTTGAGAACCTCCGCGAGATTGGGAACCTTCTGCAC
 CCCTCTGTGCCATTAGTAATGATGAGGACGCAGACAACAAGTAGAACGATTTGGGGAGATTGTACAG
 TCAGGAAGAAGTATCCCATGTGGACCTGGTGGTATGGTAGATGGCTTTGAAGGCGAAAAGGGAGCCGT
 GGTGGCTGGTAGTCGGGGTACTTCTGAAGGGCCCTGGTGTCTCGAGCAGGCGCTTATCCAATAT
 GCACTGCTACCTTGGGAGTCGGGGCTACACTCCAATCTACACCCCTTCTTCATGAGGAAAGAGGTCA
 TGCAGGAAGTGGCCAGCTCAGCCAGTTTATGAGAACTTTATAAGGTATTGGCAAAGGCAGCGAAAA
 GTCAGATGACAACTCCTATGACGAGAAATACTTGATTGCCACCTCAGAGCAGCCCATCGCGGCTCTGCAC
 CGGGACGAGTGGCTGCGGCCAGAGGATCTGCCATCAAGTACGCTGGCCTCTCCACCTGCTTTCTGCAGG
 AAGTGGCTCGCATGGCCGTGACACCCGTGGTATCTTCCGAGTCCATCAGTTTGAGAAGATTGAGCAGTT
 TGTGTACTCATCGCCCATGACAATAAGTCGTGGGAGATGTTTATGATGAGATGATCGCCACCCGAGAAGAA
 TTCTACAGTCTTTGGGATCCCTTACCACATTTGAATATTGTCTCAGGCTCCTGAATCAGCTGCCA
 GTAAGAAGCTCGACCTGGAGCCCTGGTCCCAGGCTCGGGTGCCTCCGTGAGTTGGTGTCTGTTCTAA
 TTGCACGGATTACCAAGCTCGCCGCTGAGAATCCGATATGGGCAGACCAAGAAGATGATGGACAAGAAA
 AAGAATAATCTCCGTTTCTACACAGAACAAGTTGAAGCAATGTCTTCCCTTTTTCGCCCAAGAAGG
 TGGAGTTTGTCCATATGCTTAATGCTACAATGTGTGCTACCACCCGACCATCTGCGCCATCCTGGAGAA
 CTACCAGGAGAGAAGGGCATCGCTGTGCCAGAGAAGTTGAGGGAGTTCATGCCGCCAGGCTCCAAGAG
 CTGATCCCGTTTGTGAAGCCTGCACCCATTGACCAGGAGCCATCTAAGAAGCAGAAGAAGCAACATGAAG
 GCAGCAAAAAGAAAGCGAAAGAGGTCCCTCGGAGAACCGCTGCAGAGCATGGAGGTCACTGAGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG220183 representing NM_011319
 Red=Cloning site Green=Tags(s)
 MVLDDLFRVDKGGDPALIRETQEKRFKDPGLVDQLVKADSEWRRRCFRADNLNKLKLNCSKTIGEKMKK
 KEAVGDDESVPENLVNFDLADALAAALKVVSQIKKVRLLIDEA IQKCDGERVKLEAERFENLREIGNLLH
 PSVPISNDEDADNKVERIWGDCVTRKYSYHVDLVVMVDGFEKEKAVVAGSRGYFLKGPLVFLEQALIYQ
 ALRTLGSRGYTPITYPPFMRKEVMQEVAQLSQFDEELYKVIKKGSEKSDDNSYDEKYL IATSEQPIAALH
 RDEWLRPEDLP IKYAGLSTCFRQEVGSHGRDTRGIFRVHQFEKIEQFVYSSPHDNKSWEMFDEMIATAEE
 FYQSLGIPYHIVNIVSGSLNHAASKKLDLEAWFPGSGAFRELVSCSNCTDYQARRLRIRYQTKMMMDKK
 KNNLRFSTQNKLKAMSSLFSPKKVEFVHMLNATMCATTRTICAI LENYQAEKGI AVPEKLRFPMPGLQE
 LIPFVKPAPIDQEPSKKQKQHEGSKKKAKEVPLENQLQSMEVTEA

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_011319

ORF Size: 1608 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_011319.3](#), [NP_035449.1](#)

RefSeq Size: 1866 bp

RefSeq ORF: 1611 bp

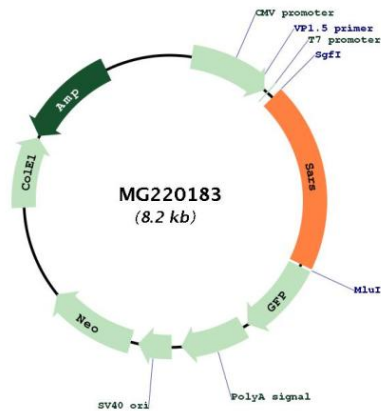
Locus ID: 20226

Cytogenetics: 3 47.08 cM

Gene Summary:

Catalyzes the attachment of serine to tRNA(Ser) in a two-step reaction: serine is first activated by ATP to form Ser-AMP and then transferred to the acceptor end of tRNA(Ser). Is probably also able to aminoacylate tRNA(Sec) with serine, to form the misacylated tRNA L-seryl-tRNA(Sec), which will be further converted into selenocysteinyl-tRNA(Sec). In the nucleus, binds to the VEGFA core promoter and prevents MYC binding and transcriptional activation by MYC. Recruits SIRT2 to the VEGFA promoter, promoting deacetylation of histone H4 at 'Lys-16' (H4K16). Thereby, inhibits the production of VEGFA and sprouting angiogenesis mediated by VEGFA.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG220183