

Product datasheet for **RC200603**

SART1 (NM_005146) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SART1 (NM_005146) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SART1
Synonyms:	Ara1; HAF; HOMS1; SART1259; SNRNP110; Snu66
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC200603 representing NM_005146
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGTCGTCCAAGAAGCATCGCGGAGAGAAGGAGGCGGCCGGGACGACGGCGGCCGGCCGACCGGGG
GTGCCACCGAGCAGCCGCGCGGCACCGGAACACAAAAACACAAGCACCGGAGTGCGCGCAGTGCGCGG
TAGCGGTGGCGAACGACGGAAGCGGAGCCGGGAACGTGGGGGCGAGCGCGGAGCGGGCGCGCGGGGCC
GAAGCTGAGGCCCGGAGCAGCACGCACGGGCGGGAGCGCAGCCAGGCAGAGCCCTCCGAGCGGCGGTGA
AGCGGGAGAAGCGCATGACGGCTACGAGGCGCGTGCCAGCTCCAAAAGTCTCAGGCGATGCCTCCTC
ACTCAGCATCGAGGAGACTAACAACTCCGGGCAAAGTTGGGGCTGAAACCCTTGAGGTTAATGCCATC
AAGAAGGAGGCGGCCACCAAGGAGGAGCCCGTGACAGCTGATGTCATCAACCCTATGGCCTTGCACAGC
GAGAGGAGCTGCGGGAGAAGCTGGCGGTGCCAAGGAGAAGCGCCTGCTGAACAAAAGCTGGGGAAGAT
AAAGACCTAGGAGAGGATGACCCTGGCTGGACGACACTGCAGCCTGGATCGAGAGGAGCCGGCAGCTG
CAGAAGGAGAAGGACCTGGCAGAGAAGAGGGCCAAAGTACTGGAGGAGATGGACCAAGAGTTTGGTGCA
GCACTCTGGTGGAGGAGGAGTTCGGGCAGAGGCGGAGGACCTGTACAGTGCCCGGGACCTGCAGGGCCT
CACCGTGGAGCATGCCATTGATTCTTCCGAGAAGGGGAGACAATGATTCTTACCCTCAAGGACAAAAGGC
GTGCTGCAGGAGGAGGAGGACGTGCTGGTGAACGTGAACCTGGTGGATAAGGAGCGGGCAGAGAAAAATG
TGGAGCTGCGGAAGAAGAAGCCTGACTACCTGCCTATGCCGAGGACGAGAGCGTGGACGACCTGGCGCA
GCAAAAACCTCGTCTATCCTGTCCAAGTATGACGAAGAGCTTGAAGGGGAGCGGCCACATTCCTCCGC
TTGGAGCAGGGCGCACGGCTGATGGCCTGCGGGAGCGGGAGCTGGAGGAGATCCGGGCCAAGCTGCGGC
TGCAGGCTCAGTCCCTGAGCACAGTGGGGCCCGGCTGGCTCCGAATACCTCACGCTGAGGAGATGGT
GACCTTTAAAAAGACCAAGCGGAGGGTGAAGAAAATCCGCAAGAAGGAGAAGGAGGTAGTAGTGCGGGCA
GATGACTTGTGCTCTCGGGGACCAGACTCAGGATGGGACTTTGGTTCAGACTGCGGGGACGGGGTTC
GCCGCCGAGTGTCCGAAGTGGAGGAGGAGAAGGAGCCTGTGCCTCAGCCCTGCCGTGCGACGACACCCG
AGTGGAGAACATGGACATCAGTATGAGGAGGAAGGTGGAGCTCCACCGCGGGTCCCCGAGGTGCTG
GAGGAGGACGAGGCGGAGCTGGAGCTGCAGAAGCAGCTGGAGAAGGACGCGGCTGCGACAGTTACAGC
AGCTACAGCAGCTGCGAGACAGTGGCGAGAAGGTGGTGGAGATTGTAAGAAGCTGGAGTCTCGCCAGCG
GGGCTGGGAGGAGATGAGGATCCCGAGCGGAAGGGGCCATCGTGTCAACGCCACGTCAGGTTCTGC
CGCACCTTGGGGAGATCCCACCTACGGGCTGGCTGGCAATCGCGAGGAGCAGGAGGAGCTCATGGACT
TTGAACGGGATGAGGAGCGCTCAGCCAACGGTGGCTCCGAATCTGACGGGAGGAGAACATCGGCTGGAG
CACGGTGAACCTGGACGAGGAGAAGCAGCAGCAGGATTTCTGTCTTCTCCACCACCATCTGGACGAG
GAACCGATCGTGAATAGGGGGCTGGCAGCTGCCCTGCTCCTGTGTGAGAACAAAGGGCTGCTGGAGACCA
CAGTGCAGAAGGTGGCCCGGTGAAGGCCCCCAACAAGTCTGCTGCCCTCAGCCGTGACTGCATCGAGGA
TAAGATGGCCATCGATGACAAGTACAGCCGGAGGGAGGAATACCGAGGCTTACACAGGACTTCAAGGAG
AAGGACGGCTACAAACCCGACGTTAAGATCGAATACGTGGATGAGACGGGCCGAAACTCACACCAAGG
AGGCTTTCCGGCAGCTGTCGACCGCTTCCATGGCAAGGGCTCAGGCAAGATGAAGACAGAGCGGGCAT
GAAGAAGCTGGACGAGGAGCGCTCCTGAAGAAGATGAGCTCCAGCGACACGCCCTGGGCACCGTGGCC
CTGCTCCAGGAGAAGCAGAAGGCTCAGAAGACCCCTACATCGTGCTCAGCGGCAGCGGCAAGAGCATGA
ACGCGAACACCATCACCAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200603 representing NM_005146
Red=Cloning site Green=Tags(s)

MGSSKKHRGEKEAAGTTAAAGTGGATEQPPRHREHKHKHRSGGSGGSGGERRKRSRERGGGERSGRRGA
EAEARSSTHGRERSQAEPSEERRVKREKRDDGYEAAASSKTSSGDASSLSIEETNKLRAKLGKPLEVNAI
KKEAGTKEEPVTADVINPMALRQREELREKLA AAKEKRLLNQLGKIKTLGEDDPWLDATAWIERSRQL
QKEKDLAEKRAKLEEMDQEFVSTLVEEEFGQRRQDLYSARDLQGLTVEHAIDSFREGETMILTLKDKG
VLQEEEDVLVNVNLVDKERAENVELRKKKPDYLPYAEDESVDLAQQKPRSILSKYDEELEGEPHSFR
LEQGGTADGLRERELEEIRAKLRLQAQSLSTVGPRLASEYLTPEEMVTFKTKRRVKKIRKKEKEVVVRA
DDLLPLGDQTQDGFGRRLRGRRRRVSEVEEKEPVPQPLPSDDTRVENMDISDEEEGGAPPGSPQVL
EEDEAELELQKLEKGRRLRQLQQLRDSGEKVVEIVKKLESRQRGWEEDEDPERKGAIVFNATSEFC
RTLGEIPTYGLAGNREEQEELMDFERDEERSANGGSESDGEENIGWSTVNLDEEKQQQDF SASSTILDE
EPIVNRGLAAALLLCQNKGLLETTVQKVARVKAPNKSLPSAVYCIEDKMAIDDKYSRREEYRGFTQDFKE
KDGYPKPVKIEYVDETGKRLTPKEAFRQLSHRFHGKSGKMKTERRMKKLDEEALLKKMSSSDTPLGTVA
LLQEKQKAQKTPYIVLSGSGKSMNANTITK

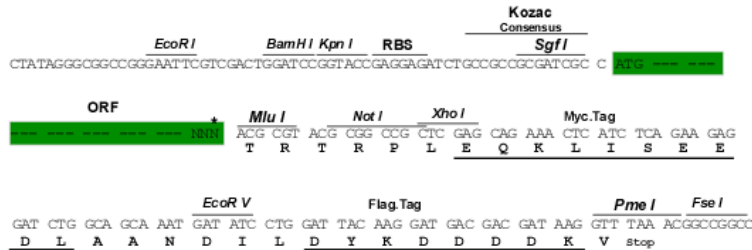
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8079_d01.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_005146

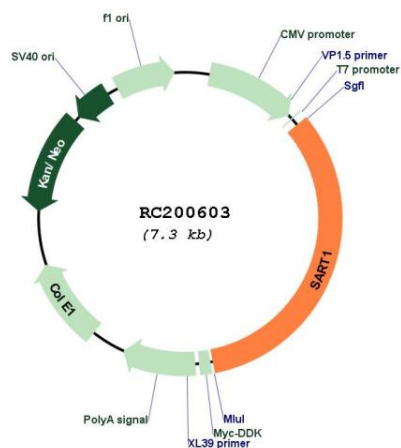
ORF Size: 2400 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

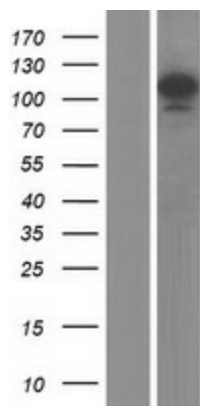
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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_005146.5
RefSeq Size:	3601 bp
RefSeq ORF:	2403 bp
Locus ID:	9092
UniProt ID:	O43290
Cytogenetics:	11q13.1
Domains:	SART-1
Protein Pathways:	Spliceosome
MW:	90.7 kDa
Gene Summary:	This gene encodes two proteins, the SART1(800) protein expressed in the nucleus of the majority of proliferating cells, and the SART1(259) protein expressed in the cytosol of epithelial cancers. The SART1(259) protein is translated by the mechanism of -1 frameshifting during posttranscriptional regulation; its full-length sequence is not published yet. The two encoded proteins are thought to be involved in the regulation of proliferation. Both proteins have tumor-rejection antigens. The SART1(259) protein possesses tumor epitopes capable of inducing HLA-A2402-restricted cytotoxic T lymphocytes in cancer patients. This SART1(259) antigen may be useful in specific immunotherapy for cancer patients and may serve as a paradigmatic tool for the diagnosis and treatment of patients with atopy. The SART1(259) protein is found to be essential for the recruitment of the tri-snRNP to the pre-spliceosome in the spliceosome assembly pathway. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC200603



Western blot validation of overexpression lysate (Cat# [LY417488]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200603 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).