

Product datasheet for **SC319408**

SART1 (NM_005146) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SART1 (NM_005146) Human Untagged Clone
Tag:	Tag Free
Symbol:	SART1
Synonyms:	Ara1; HAF; HOMS1; SART1259; SNRNP110; Snu66
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_005146.4
 CTGGGCTCGGCGGCAGCCGGGCTCGGAGTGGACGTGCCACTATGGGGTCGTCCAAGAAGC
 ATCGCGGAGAGAAGGAGGCGCCGGGACGACGGCGGGCCGGCACCCGGGGGTGCCACCG
 AGCAGCCGCCCGCGCACCCGGGAACAAAAACAAGCACCCGGAGTGGCGGCAGTGGCG
 GTAGCGGTGGCGAACGACGGAAGCGGAGCCGGGAACGTGGGGGCGAGCGCGGGAGCGGGC
 GGCGCGGGGCCGAAGCTGAGGCCGGAGCAGCACGACGGGCGGGAGCGCAGCCAGGCAG
 AGCCCTCCGAGCGGCGCTGAAGCGGGAGAAGCGCGATGACGGCTACGAGGCCGTGCCA
 GCTCCAAAACTAGCTCAGGCGATGCCTCCTCACTCAGCATCGAGGAGACTAACAACTCC
 GGGCAAAGTTGGGGCTGAAACCCCTTGGAGTTAATGCCATCAAGAAGGAGCGGGCACCA
 AGGAGGAGCCCGTACAGCTGATGTCATCAACCCTATGGCCTTGCAGACGAGAGGAGC
 TCGGGGAGAAGCTGGCAGCTGCCAAGGAGAAGCGCCTGCTGAACCAAAAGCTGGGGAAGA
 TAAAGACCCTAGGAGAGGATGACCCCTGGCTGGACGACTGCAGCCTGGATCGAGAGGA
 GCCGCAGCTGCAGAAGGAGAAGGACCTGGCAGAGAAGAGGGCCAAGTTACTGGAGGAGA
 TGGACCAAGATTTGGTGTGAGCACTCTGGTGGAGGAGGATTCGGGCAGAGCGGCAGG
 ACCTGTACAGTGCCTGGGACCTGCAGGGCCTCACCGTGGAGCATGCCATTGATTCCTTCC
 GAGAAGGGGAGACAATGATTCTTACCCTCAAGGACAAAGCGGTGCTGCAGGAGGAGGAGG
 ACGTGCTGGTGAACGTGAACCTGGTGGATAAGGAGCGGGCAGAGAAAAATGTGGAGCTGC
 GGAAGAAGAAGCCTGACTACCTGCCCTATGCCGAGGACGAGAGCGTGGACGACCTGGCGC
 AGCAAAAACCTCGCTCTATCCTGTCCAAGTATGACGAAGAGCTTGAAGGGGAGCGGCCAC
 ATTCTTCCGCTTGGAGCAGGGCGGCACGGCTGATGGCCTGCGGGAGCGGGAGCTGGAGG
 AGATCCGGGCCAAGCTGCGGCTGAGGCTCAGTCCCTGAGCACAGTGGGGCCCGGCTGG
 CCTCCGAATACCTCACGCTGAGGAGATGGTACCTTTAAAAAGACCAAGCGGAGGGTGA
 AGAAAATCCGCAAGAAGGAGAAGGAGTGTAGTGCGGGCAGATGACTTGGCTGCCTTCG
 GGGACCAGACTCAGGATGGGGACTTTGGTTCCAGACTGCGGGGACGGGGTCCGCCCGCAG
 TGTCCGAAGTGGAGGAGGAGAAGGAGCCTGTGCCTCAGCCCTGCCGTGCGACGACACCC
 GAGTGGAGAACATGGACATCAGTGATGAGGAGGAAGGTGGAGCTCCACCGCGGGGTCCC
 CGCAGGTGCTGGAGGAGGACGAGGCGGAGCTGGAGCTGCAGAAGCAGCTGGAGAAGGGAC
 GCCGGCTGCGACAGTTACAGCAGCTACAGCAGCTGCGAGACAGTGGCGAGAAGGTGGTGG
 AGATTGTGAAGAAGCTGGAGTCTCGCCAGCGGGGCTGGGAGGAGGATGAGGATCCCAGC
 GGAAGGGGGCCATCGTGTCAACGCCACGTCCGAGTTCTGCCGCACCTTGGGGGAGATCC
 CCACCTACGGGCTGGCTGGCAATCGCGAGGAGCAGGAGGAGCTCATGGACTTTGAACGGG
 ATGAGGAGCGCTCAGCCAACGGTGGCTCCGAATCTGACGGGGAGGAGAACATCGGCTGGA
 GCACGGTGAACCTGGACGAGGAGAAGCAGCAGCAGGATTTCTCTGCTTCCACCACCA
 TCCTGGACGAGGAACCGATCGTGAATAGGGGGTGGCAGCTGCCCTGCTCCTGTGTGAGA
 ACAAAGGGCTGCTGGAGACCACAGTGCAGAAGGTGGCCCGGGTGAAGGCCCAACAAGT
 CGCTGCCCTCAGCCGTGACTGCATCGAGGATAAGATGGCCATCGATGACAAGTACAGCC
 GGAGGGAGGAATACCGAGGCTTACACAGGACTTCAAGGAGAAGGACGGCTACAAACCCG
 ACGTTAAGATCGAATACGTGGATGAGACGGGCCGAAACTCACACCAAGGAGGCTTTCC
 GGCAGCTGTCGCACCCTTCCATGGCAAGGGCTCAGGCAAGATGAAGACAGAGCGGCGGA
 TGAAAGAAGCTGGACGAGGAGGCGCTCCTGAAGAAGATGAGCTCCAGCGACACGCCCTGG
 GCACCGTGGCCCTGCTCCAGGAGAAGCAGAAGGCTCAGAAGACCCCTACATCGTGCTCA
 GCGGCAGCGCAAGAGCATGAACGCGAACACCATACCAAGTACAGCGCCCTCCCGCC
 CGGCCCTGCCTCAACCTTCATATTAATAAAGCTCCCTCCTTAAAAAAAAAAAAAAAAAAAA
 AAAAAA

Restriction Sites: Please inquire

ACCN: NM_005146

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_005146.4](#), [NP_005137.1](#)

RefSeq Size: 3601 bp

RefSeq ORF: 2403 bp

Locus ID: 9092

UniProt ID: [O43290](#)

Cytogenetics: 11q13.1

Domains: SART-1

Protein Pathways: Spliceosome

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]