

Product datasheet for **RR201073**

Stn1 (NM_001011943) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: Stn1 (NM_001011943) Rat Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: Stn1
 Synonyms: Obfc1
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 Cell Selection: Neomycin
 ORF Nucleotide Sequence: >RR201073 representing NM_001011943
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCAGAACCTTGCCTTTTGATGCAGTGCGAATCCAGTCCAAAAGAAGAGGAGATCCCCTCCCTTTT
 GGGTCTGGATCCCGTGTCTAGCCTTTGCAAACTCTACATCAAGGACATCCTGGAGATGAAGGAGTC
 CCAACAAGTGCCAGGCATGTATTTTACAATGGACATCCAATAAGACGGGTGGATATCATGGGAGCTGC
 ATCAGTGTGAAAGAGAGAGACTTTCTACAGCTATGGAGTGGATGACGCCACAGGGTTATAAACTGTG
 TGTGCTGAAAAGGCCAAGCAATGCCGAGTCTTCATCAGACCCAGCTATTCTGAGCACTTCGAGAGAACT
 CAGCATGACCTCACAGCTTAAGAACTGCAGGAGACCATTGAGCAGAAAACCAAGATCGGGATTGGGGAT
 ATCATCCGAGTCCGAGGCTACGTGCGTATGTTCCGAGAAGAGCGAGAGATCTGTGCCACCATTTATTATA
 AGGTGGACGATCCAGTGTGGAACATGCAAAATGCAAGGATGCTTGAGCTGCCAGAGCTCTACAAGAAGGT
 GTATGACCAGCCCTCCGGAACCCAGCCCTAAAGGAGGAAGAGGCACTAAACAGTAAAGACATTTGGAT
 CTCGCTGGCCTCACGGCTTTGTTGAGTGAGAAAAGTTAAAGAATTTCTCCAGGAGAAGAAAGTGCAAAGCT
 TCTACCAGAAGGAGCTGGAAATGGTGGAGCCCTTGCACTCTGGCCAGTCAGCCCGTGACCCACAGCAC
 GTGCTCGGACCAAGTGGAGTTAAAGAACGACGCCGCTTCTGACATACACAGTGTGTTAAAGAATGCTCTG
 CACCTGCTTCAGGAAAAGGGTTCGTGTTCCAGAGAGACGGTGGCTCCGATAAGCTGTACTATGTTACCA
 GTAAGGACAAAGACCTGCACCAGAAGATCTACCAGATCATTAAAGGAAGACTGTCAGAAAACCAATCTGTG
 GTGCATGCTGCCTCAGGAGGCCTGGAGAGGACTGAGGAAGGCCTGGCCGTCGTGGTCACACTTAGTGTC
 TGCCTGCCCTTGCCCGTAGATGTGGAGAAGGGCTGCCACTTGATGCACGTCTGAACCTGCGTCTCTCA
 ACCTCCGCTGGGACCTGAACAAGGCTGTGCTGCAGCAGGTGCTGGAGCTCCTGGAGGACCAGAGCGACAT
 TGTGAGTACTGGAGACCACTACTACACGGCCTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RR201073 representing NM_001011943
 Red=Cloning site Green=Tags(s)

MPEPCLLMQCESSPKEEEIPSLFWGLDPVFLAFALYIKDILEMKESQQVPGMYFYNGHPIRRVDIMGAV
 ISVKERETFYSYGVDATGVINCVCWKRPNSNAESSDPAILSTSRELSMTSQLKKLQETIEQKTKIGIGD
 IIRVRGYVRFREEREICATIYYKVDDPVWNMQIARMLPEL YKKVYDQFFRNPALKEEEALNSKDTLD
 LAGL TALLSEKVKEFLQEKKVQSFYQKELEMVEPLQLSASQPVTHSTCSDQVELKNDAA SDIHSVFKNAL
 HLLQEKG FVQRDGGSDKLYYVTSKDKDLHQKIYQI IKEDCQKPNLWCMLPQEAWRGTEEGLAVVVTLSV
 CLPLPVDVEKGCHLMHVLNVCVLLNLRWDLNKAVLQQVLELLEDQSDIVSTGDHYTAF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

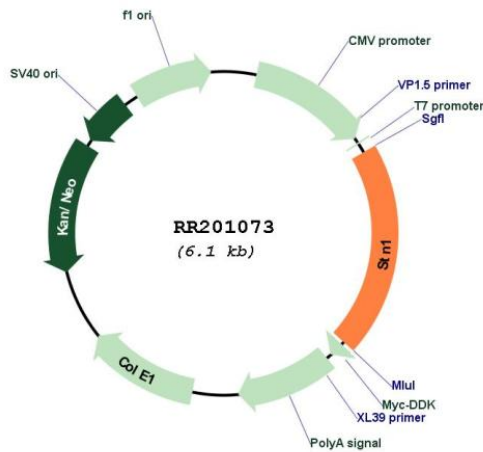
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001011943

ORF Size:	1224 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:	<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_001011943.1 , NP_001011943.1
RefSeq Size:	1555 bp
RefSeq ORF:	1227 bp
Locus ID:	294025
UniProt ID:	Q6AYD2
Cytogenetics:	1q54
MW:	46.8 kDa

Gene Summary:

Component of the CST complex proposed to act as a specialized replication factor promoting DNA replication under conditions of replication stress or natural replication barriers such as the telomere duplex. The CST complex binds single-stranded DNA with high affinity in a sequence-independent manner, while isolated subunits bind DNA with low affinity by themselves. Initially the CST complex has been proposed to protect telomeres from DNA degradation. However, the CST complex has been shown to be involved in several aspects of telomere replication. The CST complex inhibits telomerase and is involved in telomere length homeostasis; it is proposed to bind to newly telomerase-synthesized 3' overhangs and to terminate telomerase action implicating the association with the ACD:POT1 complex thus interfering with its telomerase stimulation activity. The CST complex is also proposed to be involved in fill-in synthesis of the telomeric C-strand probably implicating recruitment and activation of DNA polymerase alpha. The CST complex facilitates recovery from many forms of exogenous DNA damage; seems to be involved in the re-initiation of DNA replication at repaired forks and/or dormant origins. Required for efficient replication of the duplex region of the telomere. Promotes efficient replication of lagging-strand telomeres. Promotes general replication start following replication-fork stalling implicating new origin firing. May be involved in C-strand fill-in during late S/G2 phase independent of its role in telomere duplex replication (By similarity).[UniProtKB/Swiss-Prot Function]