

Product datasheet for MR205901

Stn1 (NM_175360) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Stn1 (NM_175360) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Stn1
Synonyms:	0610009H20Rik; 2310057J23Rik; AAF-44; AAF44; AI413458; Obfc1; RPA-32
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205901 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGTGTGAATCCAGTCCAAGGGAAGAGGAGATCCCGCCCCTCTTTGGGGTCTGGATCCTGTGTTTC
TAGCCTTTGCAAACTCTACATCAAGGATATCCTGGAGATGAAGGAGTCCCAACAAGTGCCAGGTACATA
TTTTTACAACGGGCATCCAATAAGGCGGGTAGATATCATGGGAGCTGTCATCAGCGTAAAGAAAGAGAG
ACTTTCTACAGCTACGGAGTGGACGATGCCACTGGGGTTATAAACTGCGTCTGCTGGAAGAAGCTGAGCA
ATGCTGAGTCTTCTCAGACCCAGCTATTCTGAGCACTGCGAGAGAGCTTAGCATGACATCACAGCTTAA
GAAGCTGCAGGAGACCATCGAGCAGAAAACCAGGATAGGGATTGGAGATATCATCCGAGTCCGAGGCTCT
GTGCGCATGTTCCGAGAAGAGCGAGAGATCTGTGCCAACATTTATTATAAGGTGGACGATCCAGTGTGGA
ACATGCAATCGCAAGGATGCTTGAGCTGCCAAGCTCTACCAGAAGGTGTACGACCAGCCCTTCCGTAA
CCCAGCCCTACAGGAGGAGGAAGCACTAAACAATAAAGACAATTTGGATCTCGCTGGCCTCACATCTTTG
CTGAGTGAGAAAATTAAGAATTCCTCCAGGAGAAGAAAATGCAAAGCTTCTACCAGCAGGAGTTAGAGA
CAGTGGAGTCTTTGCAGTCTCTGGCCAGTCGGCCTGTGACCCACAGCACGGGCTCGGACCAAGTGGAGTT
AAAGGACAGTGGCACTTCTGGCGTAGCGCAGAGAGTGTTAAGAATGCTCTCCAGCTGCTTCAGGAAAAA
GGACTCGTGTTCAGAGAGACAGTGGCTCTGATAAGCTGTACTACGTAACCACCAAGACAAAGACCTGC
AGCAGAAGATCTACCACATCATTAAAGGAAGACTGTCAGAAACCAACCATATGGAGAAGGGCTGCCACCT
GCTACACATCCTGAAGTGCCTGCACCTCAACCTCCGCTGGGACCTGAGCAAGGCTGTGCTGCAGCGGGT
CTGGAGCTCCTGGAGACCAGAGTGACATCGTCAGCACCGCGGACCACTACTACGCGCCTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >MR205901 protein sequence
Red=Cloning site Green=Tags(s)

MECESSPREEEIPPLFWGLDPVFLAFKLYIKDILEMKESQQVPGTYFYNGHPIRRVDIMGAVISVKERE
 TFYSYGVDATGVINCVCWKLSNAESSDPAILSTARELSMTSQLKKLQETIEQKTRIGIGDIIRVGRS
 VRMFREEREICANIYYKVDPPVNMQIARMLLPKLYQKVYDQPFNPALQEEALNNKDNLDLAGLTSL
 LSEKIKEFLQEKKMQSFYQQELETVESLQSLASRPVTHSTGSDQVELKDSGTSGVAQRVFNALQLLQEK
 GLVFRDRSGSKLYYVTTKDKDLQQKIYHIKEDCQKPNHMEKGCHLLHLKCVHLNLRWDLKAVLQRY
 LELLEDDQSDIVSTADHYAAF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_175360

ORF Size: 1116 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_175360.1](#), [NM_175360.2](#), [NP_780569.1](#)

RefSeq Size: 1878 bp

RefSeq ORF: 1137 bp

Locus ID: 108689

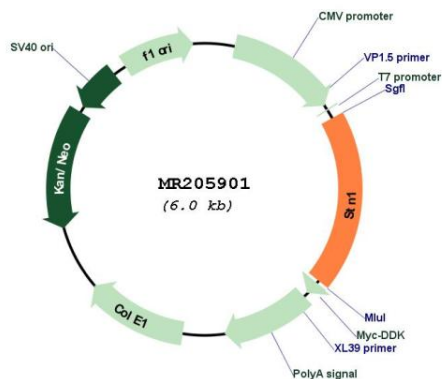
UniProt ID: [Q8K2X3](#)

Cytogenetics: 19 C3

MW: 42.7 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 (PubMed:19854130). 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 (PubMed:22748632). 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]

Product images:



Circular map for MR205901