

Product datasheet for **MR205901L3V**

Stn1 (NM_175360) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Stn1 (NM_175360) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Stn1
Synonyms:	0610009H20Rik; 2310057J23Rik; AAF-44; AAF44; AI413458; Obfc1; RPA-32
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_175360
ORF Size:	1116 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR205901).
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.
RefSeq:	NM_175360.2 , NP_780569.1
RefSeq Size:	1878 bp
RefSeq ORF:	1137 bp
Locus ID:	108689
UniProt ID:	Q8K2X3
Cytogenetics:	19 C3



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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]