

Product datasheet for RR214207

Smc1a (NM_031683) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smc1a (NM_031683) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Smc1a
Synonyms:	SB1.8; SMC-1A; Smc111
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR214207 representing NM_031683 Red=Cloning site Blue=ORF Green=Tags(s)

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CTGTGTATGGCCGCTCATTGACCTCTGCCAGCCTACACAAAAGAAGTATCAGATTGCTGTGACCAAGGT
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Protein Sequence: >RR214207 representing NM_031683
 Red=Cloning site Green=Tags(s)

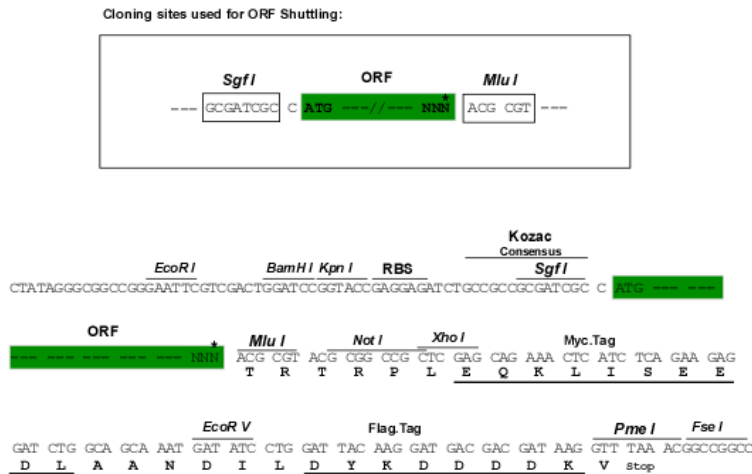
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Restriction Sites:

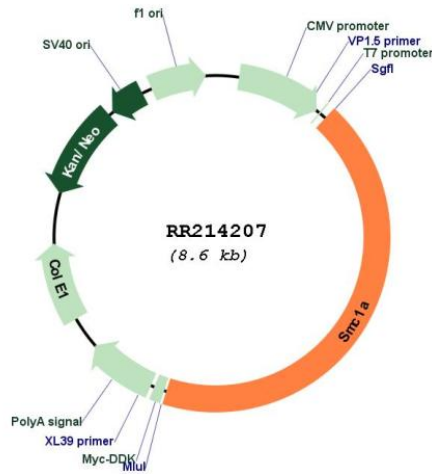
Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_031683

ORF Size: 3699 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_031683.1](#), [NP_113871.1](#)

RefSeq Size: 3933 bp

RefSeq ORF: 3702 bp

Locus ID: 63996

UniProt ID: [Q9Z1M9](#)

Cytogenetics: Xq13

MW: 143.2 kDa

Gene Summary: structural maintenance of chromosomes (SMC) protein, one of 2 component proteins forming the cohesin multiprotein complex required for sister chromatid cohesion; thought to be a component of functional kinetochores [RGD, Feb 2006]