

Product datasheet for **RN214207**

Smc1a (NM_031683) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smc1a (NM_031683) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Smc1a
Synonyms:	SB1.8; SMC-1A; Smc111
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN214207 representing NM_031683 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGTTTCTGAACTGATTGAGATTGAGAACTTAAATCGTACAAGGGTCGACAAATTATCGGACCAT
TTCAGAGGTTACCGCCATCATTGGACCAATGGCTCTGGTAAGTCAAATCTCATGGATGCCATCAGCTT
TGTGCTTGGTAAAAACAGCAACCTGAGGGTAAAGACCCTGAGGGACCTGATACACGGAGCTCCTGTG
GGCAAGCCGGCTGCCAACCGAGCCTTTGTGAGCATGGTCTACTCCGAGGAGGGTGCCTGAGGACCGCACCT
TTGCCCGAGTCATTGTAGGGGGCTCTTCTGAGTACAAGATCAATAACAAAGTTGTCCAGCTACATGAATA
CAGTGAAGAGTTAGAGAAGTTGGGCATTCTCATCAAAGCTCGTAACTTCCCTCGTCTTCCAGGGTGCAGTG
GAATCTATTGCCATGAAGAACCCCAAGGAGAGGACAGCTTTATTTGAAGAAATTAGTCGCTCTGGGGAAC
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TCGCAAGAAAAATATTGCAGCTGAACGCAAGGAGGCCAAACAAGAAAAGGAGAGGCTGACCGCTACCAG
GCCCTGAAGGATGAGGTAGTACGCGCACAGGTACAATTGCAGCTTTTTAACTCTACCACAACGAAGTGG
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GAGAAGGAGATCAAGGAAAAGGACTCAGAATTGAATCAGAAGAGGCCCTCAGTACATCAAAGCAAAAAGAGA
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GAAGAGCGGATGGAGGAAGAGAGTCAGAGTCAAGGCAGAGACTTGACCCTGGAGGAGAACCAGGTAAGA
AATACCACCGATTAAGAGGAAGCTAGCAAGAGAGCAGCCACTTTGGCTCAGGAGCTGGAGAAGTTTAA
TCGAGACCAGAAAGCTGACCAGGACCGTCTAGATCTAGAAGAGCGGAAGAAAGTAGAGACAGAGGCCAAG
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CTAGCAAGCAGTCTCTAGAGGAACAGAAGAAGCTAGAGGGAGAATTGACAGAAGAAGTAGAGATGGCCAA
CGTTCGATTGATGAGATCAATAAGGAGCTGAACCAGGTGATGGAGCAATTGGGGGATGCCGCGATTGAC
CGGCAGGAGAGCAGCCCGCAGCAGAGGAAGGCAGAAATATGAAAGCATCAAGCGTCTCTACCTGGTT



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CTGTGTATGGCCGCTCATTGACCTCTGCCAGCCTACACAAAAGAAGTATCAGATTGCTGTGACCAAGGT
 TTTAGGAAAGAACATGGATGCTATTATTGTAGACTCCGAGAAGACAGGTCGGGATTGATTTCAGTATATC
 AAGGAGCAACGTGGAGAGCCTGAGACCTTCTTGCCTCTTGACTACCTGGAGGTGAAACCTACTGATGAGA
 AACTCCGAGAAGTGAAGGGGGCCAAGCTAGTGATTGATGTGATTTCGCTATGAGCCACCTCACATCAAAAA
 AGCTCTGCAGTATGCTTGTGGCAATGCCCTTGTGTGACAATGTGGAGGATGCGCGACGAATTGCCTTT
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 CAAGGCATCTTGCCTGAATCTCCAGGAAAAATCTAAGCTGGAGAGTGAAGTACTAGCCAACTTCGGGCTCG
 AATTAATGATATCAAGAGAATCATACAGAGCCGAGAGAGGAAATGAAAGACTTGAAGGAGAAGTGAAC
 CAGGTGGAAGATGAGGTGTTTGAAGAGTTTTGTCGGGAGATTGGTGTGCGTAACATCCGCGAATTTGAGG
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 ACAGTAAAAAGGATGAAATGAGATAGAAAAGCTTAAGAAGGAGGAGCAAGACACATGAAGATAATAG
 ATGAAACCATGGCTCAGCTCCAAGACCTTAAGAATCAGCACCTGGCCAAAAGTCAAGAAGTGAATGACAA
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 GAAGTGACAGCCATTGAGACCAAGCTTGAACAGAAGCGCAGTGACCGCCACAACCTGCTACAGGCCTGTA
 AGATGCAGGACATCAAAATGCCACTGTCAAAGGGCACCATGGATGATATTAGTCAGGAAGAAGGTGGCTC
 CCAGGGAGAAGAGTCAGTGAGTGGTCCAGAGAACATCTAGTATCTATGCACGAGAGGCCCTCATTGAG
 ATTGACTACGGTGACCTGTGTGAAGATCTGAAGGATGCACAGGCGGAAGAAGAAATCAAGCAAGAGATGA
 ACACACTCCAGCAAAAGCTGAATGAGCAGCAGAGTGTGCTTCAGAGGATTGCTGCCCTAACATGAAGGC
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 CGAGCAAAGAAAAGCCAAAGCAGGCATTTGAACAGATAAAGAAGGAGCGCTTTGACCGATTCAATGCTTGT
 TTGAATCTGTGGCTACCAATATTGATGAGATCTACAAGGCTCTGTCCCGTAACAGCAGTGCCAGGCATT
 CTTGGGCCCGAGAATCCTGAAGAGCCCTATTTGGATGGTATCAACTACAAGTGTGTAGCTCCTGGCAAA
 CGTTTTCCGGCCTATGGACAATTTGTCCAGCGGGGAGAAGACAGTTGCCGCACTGGCCTTGTCTTTTGGCA
 TTCACAGCTACAAGCCAGCCCCCTTCTTCGTCTGGATGAGATTGATGCTGCCTTGATAACACCAACAT
 TGGCAAGGTGGCAAAATACATCAAGGAGCAGTCAACTTGAAGTCCAGGCCATTGTTATCTCTCTCAAG
 GAGGAATTCTACACCAAGGCTGAGAGCCTCATTGGAGTCTATCCTGAGCAAGGAGACTGTGTGATCAGCA
 AAGTCTGACCTCGACCTACCAAGTATCCAGATGCCAACCTAACCCCAATGAACAA**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_031683
- Insert Size:** 3702 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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

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]