

Product datasheet for **SC108334**

SMC6L1 (SMC6) (NM_024624) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMC6L1 (SMC6) (NM_024624) Human Untagged Clone
Tag:	Tag Free
Symbol:	SMC6L1
Synonyms:	hSMC6; SMC-6; SMC6L1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_024624, the custom clone sequence may differ by one or more nucleotides

```

ATGGCCAAAAGAAAGGAAGAAAATTTTTCTCTCTCTAAAAATGCCAAAAGGCCAAGACAAGAAGAATTGG
AGGATTTTGATAAAGATGGTGACGAAGACGAATGTAAAGTACTACTTTGACTGCAGCAGAAGTTGGAAT
AATTGAGAGTATTCACCTAAAAAATTCATGTGTCATTCAATGCTTGGACCTTTTAAAGTTGGTTCTAAT
GTCAACTTTGTTGTTGGCAACAATGGAAGTGGGAAGAGTGCAGTACTCACAGCTCTCATAGTCGGTCTTG
GTGGAAGAGCAGTTGCTACTAATAGAGGATCCTCTTTAAAAGGTTTTGTGAAAGATGGACAGAAGCTGCG
AGATATCTCAATAACATTGAGGAACAGAGGAGATGATGCCTTTAAAGCCAGTGTGTATGGTAACTCTATA
CTTATACAGCAACACATCAGCATAGATGGAAGTCGATCTTATAAACTTAAAAGTGAACAGGCTCCGTGG
TTTCCACGAGGAAAGAAGAGCTGATTGCAATTCTTGATCATTTTAAACATCCAGGTGGATAATCCAGTTTC
TGTTTTAACACAAGAAATGAGCAAGCAGTTCTTACAGTCTAAAAATGAAGGAGACAAATACAAATCTTTC
ATGAAAGCAACGCAACTTGAACAGATGAAGGAAGATTATTCATACATTATGGAACGAAAGAAAGAACAA
AGGAGCAGATACATCAAGGAGAAGAGCGGCTTACTGAACTAAAGCGCCAGTGTGTAGAGAAAAGAGGAACG
TTTTCAAAGTATTGCTGGTTTAAAGTACAATGAAGACTAATTTAGAGTCTTGAACATGAAATGGCTTGG
GCAGTGGTCAATGAAATGAAAAACAATTGAATGCCATCAGAGATAATATCAAAATGGAGAAGATCGTG
CTGCTAGACTTGACAGGAAAATGGAAGAACAGCAGGTGAGACTTAAATGAGGCAGAACAAAAGTACAAGGA
TATTCAGACAAAATAGAAAAGATTAGTGAAGAGACAAATGCACGAGCACCAGAATGTATGGCATTGAAA
GCAGATGTTGTTGCTAAGAAAAGGGCCTATAATGAAGCTGAGGTTTTATATAACCGATCCTTAAACGAAAT
ATAAAGCATTAAAGAAAGATGATGAGCAGCTTTGTAAACGAATTGAAGAGCTGAAAAAAGTACTGACCA
ATCTTTGGAACCTGAACGGTTGGAAGACAAAAAAAATATCTTGGTTAAAAGAGAGAGTAAAGGCCCTTT
CAAAATCAAGAAAATTCAGTCAATCAAGAGATCGAACAGTTTCAGCAAGCCATAGAAAAGGACAAAAGAA
AACATGGCAAAATTAAGAGAGAAGAATTAGATGTGAAGCATGCACTGAGCTACAATCAGAGGCAACTGAA
AGAATTGAAAGATAGTAAAATGATCGACTCAAAAGATTTGGCCCTAATGTTCCAGCTCTTCTTGAAGCC
ATAGATGATGCTTATAGACAAGGACATTTACCTATAAACCTGTAGGCCCTTTAGGAGCTTGCATTCATC
TTCGGGACCCAGAACTTGCTTTGGCTATTGAATCTTGCTTAAAAGGGCTTCTGCAGGCCTATTGTTGCCA

```



[View online »](#)

TAATCATGCTGATGAAAGGGTCCTTCAGGCACTCATGAAAAGGTTTTATTTACCAGGGACCTCACGGCCA
 CCGATAATAGTTTCTGAGTTTCGGAATGAGATATATGATGTAAGACACAGAGCTGCTTATCATCCAGACT
 TTCCAACAGTTCTGACAGCTTTAGAAAATAGATAATGCGGTTGTGGCAAATAGCCTAATTGACATGAGAGG
 CATAGAGACAGTGCTACTAATCAAAAATAATTCTGTAGCTCGTGCAGTAATGCAGTCCCAAAAGCCACCC
 AAAAATGTAGAGAAGCTTTACTGTGATGGTGATCAAGTTTTGCAGGACGTTATTATTCATCTGAAA
 ATACAAGACCTAAGTTCCCTAAGCAGAGATGTGGATTCTGAAATAAGTGACTTGGAGAATGAGGTTGAAA
 TAAGACGGCCAGATATTAATCTTCAGCAACATTTATCTGCCCTTGAAAAAGATATTAACACAATGAG
 GAACTTCTTAAAAGGTGCCAACTACATTATAAAGAACTAAAGATGAAAATAAGAAAAAATTTCTGAAA
 TTCGGAACTTGAGAACATAGAAGAACCAGTCTGTAGATATTGCAACTTTGGAAGATGAAGCTCAGGA
 AAATAAAAGCAAAATGAAAATGGTTGAGGAACATATGGAGCAACAAAAAGAAAATATGGAGCATCTTAAA
 AGTCTGAAAATAGAAGCAGAAAAAAGTATGATGCAATTAATTCAAAATTAATCAACTATCGGAGCTAG
 CAGACCCACTTAAGGATGAATTAACCTTGCTGATTCTGAAGTGATAACCAAAAACGAGGGAAACGACA
 TTATGAAGAAAAACAAAAGAACACTTGGATACCTTAAATAAAAAGAAAACGAGAAGTGGATGAAAGAG
 AAAGAAGTAGAGGAGAAAATGTCACAAGCAAGACAATCTGCCAGAGCGTATAGAAGTAGAAAAATCTG
 CATCAATTCTGGACAAAGAAATTAATCGATTAAGGCAGAAGATACAGGCAGAACATGCTAGTCATGGAGA
 TCGAGAGGAAAATATGAGGCAGTACCAAGAAGCAAGAGAGACCTATCTTGATCTGGATAGTAAAGTGAGG
 ACTTTAAAAAAGTTTATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA
 GAAGGTGTTTGACTTTACGATGCAAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA
 AATGAATTTTGACCACAAGAATGAAACTCTAAGTATATCAGTTTCAAGCCTGGAGAAGGAAATAAAGCTGCT
 TTCAATGACATGAGAGCCTTGCTGGAGGTGAACGTTCTTTTCCACAGTGTGTTTTATTTCTTCCCTGT
 GGTCCATCGCAGAATCTCTTTCAGATGCTGGATGAATTTGATGCTACATGGATAGGTTAATAGGAG
 AATTGCCATGGACTTGATCTGAAGATGGCAGATTCCCAGCGTTTTAGACAGTTTATCTTGCTCACACCT
 CAAAGCATGAGTTCACCTCCATCCAGTAACTGATAAGAATTCTCCGAATGTCTGATCCTGAAAGAGGAC
 AAATAACATTGCCCTTTCAGACCTGTGACTCAAGAAGAAGATGATGACCAAAAGTGA

**5' Read Nucleotide
Sequence:**

>OriGene 5' read for NM_024624 unedited
 TAGAATTTTGGTAATACGACTCACTATAGGGCGGCCGCGATTTCGGCACCAGCTGCGGCCG
 GCACGCGGTTCCAGGGGCCAGCGCGGTTCAGCCGAGGTCGAGACGCCCGCAGGGTGGCC
 TTAGCGGCGGTTCGTACCACGGCAGCCCGCGATCAGTTTCTTTGGGAGACTTCGACT
 TGTTGGCGACCTGATGGCCAAAAGAAAGGAAGAAAATTTTCTCTCCTAAAAATGCCAA
 AAGGCCAAGACAAGAAGAAATGGAGATTTTGATAAAGATGGTGACGAAGACGAATGTAA
 AGGTAATACTTTGACTGCAGCAGAAGTTGGAATAATTGAGAGTATTCACCTAAAAAATTT
 CATGTGTCATTCAATGCTTGGACCTTTAAGTTTGGTTCTAATGTCAACTTTGTTGTTGG
 CAACAATGGAAGTGGAAGAGTGCAGTACTCACAGCTCTCATAGTCGGTCTTGGTGGAG
 AGCAGTTGCTACTAATAGAGGATCCTCTTAAAAGTTTTGTGAAAGATGGACAGAATC
 TGCAGATATCTCAATAACATTGAGGAACAGAGGAGATGATGCCTTAAAGCCAGTGTGTA
 TGGTAATCTATACTTATACAGCAACACATCAGCATAGATGGAAGTCGATCTTATAAACT
 TAAAAGTGCAACAGGCTCCGTGGTTCCACGAGGAAAGAAGAGCTGNATTGCATTCTTGA
 TCATTTTAAACATCCAGGTGGATAATCCAGTTTCTGTTTTAACACANAGAAATGAGCAGCA
 GTTCTTACAGTCTANAAATGAAGGGAGACAATACANATTTCTCATGAANAGCACGCAACT
 TGNACAGATGAAGGNNAGATTTTATACATTATGGNNAACGAAGAAGACCAAGAGCAGAT
 CCTCAAGGAAGAGCGGCTACTGACTAAGCGCATGTGTANAGAAAAG

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_024624 unedited CCGCGGCCGCAATTTAGAGTCGAGTTTTTTTTTTTTTTTTTTTATACTCTACTTCATTTT TAATTTGGAAAAGCACATGTTAAAAATAATTTTAAACAAAGGCATTATAAGTGTAATTT TAAAAATCAGACTTTGTATGATCAGTGGGAAATGTTTAAAAATTCAGCACACACTTTCC TCCTCCTGGAAATCTGATTAGAAAGCCCAAGTTTTTGAAGTTCTCATTGGCAAACCTC AATTTAAGACTAAAGTATCTTAACTTCTCCTCCACAAAAACAAAAAGTCCAGT TTTCCTCAATAACTAGAGAACAGTCCCTGCTCTTAATATACTGCCCTTTTTCTGAAAATA GTTCAATTTTCATATTTATTCTAATATTTATTGCTACTAATGTAAGGAATGCTTCTTGATA TCCAATACATTCTTAAAAAGTTTAGCATGAATCCTAGTATCAAACAAATAATACAGGGAG CAATAAAATTCATGTTTTCTAAAATAAAAAGTTTCAATAATATCATTTTTTACAATAACTA TATTTGGCATTCTAAGCAGCACACTTTTTAACACCCCTCATTTAGGATGAGTCTTAGAA TTGATGTCAGCTCACCATCAACTGCCTGGCCTCAGGCTCCTGGAGCCATGACCTACTCTC CTGCTACATGAGGATCCCCCCTCCCTCCAGTTTTCCCAACCCTTCTACCAACCTGATA TCCCCAGCCCTTAGCCTGTGACTCCTCACTGACGACAATCCTGAACAGCCCTTGGCCT GCACAACCTGAGGCCTTTCCAATCCGCCACCCTTGATGGAGTCAAAGGGAAAAACTGGGTC TTATTCGGTCCCGAACCTGGTTTTACCTCTTTGCTGGGGACCGTCAAAGGCGGCCAAC AGCCTGGGACTAATTGGTCAANCTTCGTGTCCCTCCACGGGCCGTATTCCCTGCGCCACC ACCTTGGAAATGACAACCCCTCCCTCAACCTCTCGCGTACTTTACAGCCGATCTTGGAAC CAAAAT
Restriction Sites:	NotI-NotI
ACCN:	NM_024624
Insert Size:	5000 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:	<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:	<u>NM_024624.3</u> , <u>NP_078900.1</u>
RefSeq Size:	5151 bp
RefSeq ORF:	3276 bp
Locus ID:	79677
UniProt ID:	<u>Q96SB8</u>
Cytogenetics:	2p24.2
Domains:	SMC_C

Gene Summary:

Core component of the SMC5-SMC6 complex, a complex involved in DNA double-strand breaks by homologous recombination. The complex may promote sister chromatid homologous recombination by recruiting the SMC1-SMC3 cohesin complex to double-strand breaks. The complex is required for telomere maintenance via recombination in ALT (alternative lengthening of telomeres) cell lines and mediates sumoylation of shelterin complex (telosome) components which is proposed to lead to shelterin complex disassembly in ALT-associated PML bodies (APBs). Required for recruitment of telomeres to PML nuclear bodies. SMC5-SMC6 complex may prevent transcription of episomal DNA, such as circular viral DNA genome (PubMed:26983541).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) lacks an alternate exon in the 5' UTR, compared to variant 1. Both variants 1 and 2 encode the same protein.