

Product datasheet for **SC300449**

SMC4 (NM_001002800) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMC4 (NM_001002800) Human Untagged Clone
Tag:	Tag Free
Symbol:	SMC4
Synonyms:	CAP-C; CAPC; SMC-4; SMC4L1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC300449 representing NM_001002800. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC**CGCATCGCC**
ATGCCCGTAAGGCACCCAGCCCTCCACTGCCGGCGCAGAGGAAGGGCCGCCGCCGCTCCCT
GACGGCGCCAGCAGCAGCGGAGCCTGAGCCGCCGTCGGCCGCACGGAGAGCCAGCCACCGCCGCA
GAGACTGCAAGTGAAGAACTTGATAATAGAAGTTTGAAGAGATTTTGAACAGCATTCTCTCCCCG
CCTCCAGCAATGACCAATGAAGCTGGAGCTCCTCGGCTTATGATAACTCATATTGTAAACCAGAATT
AAATCCTATGCTGGGGAGAAAAATCTGGGACCTTTCCATAAGCGCTTTCTGTATTATCGGGCCAAAT
GGCAGTGGCAAAATCCAATGTTATTGATTCTATGCTTTTTGTGTTGGCTATCGAGCACAAAAATAAGA
TCTAAAAAATCTCAGTATTAATACATAATTCTGATGAACACAAGGACATTGAGAGTTGTACAGTAGAA
GTTCAATTTTCAAAGATAATTGATAAGGAAGGGGATGATTATGAAGTCATTCTAACAGTAATTTCTAT
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GATGTTGGAAATCTTCTCGAAGCCATGGAATTGACTTGGACCATAATAGATTTTAAATTTTACAGGGT
GAAGTTGAACAAATTGCTATGATGAAACCAAAAGGCCAGACTGAACACGATGAGGGTATGCTTGAATAT
TTAGAAGATATAATTGGTTGTGGACGGCTAAATGAACCTATTAAGTCTTGTGTCGGAGAGTTGAAATA
TTAAATGAACACAGAGGAGAGAAGTTAAACAGGGTAAAGATGGTGGAAAAGGAAAAGGATGCCTTAGAA
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TGTCATATTATATTTATGAGTTGCAGAAACGAATTGCTGAAATGGAACTCAAAGGAAAAAATTCAT
GAAGATACCAAGAAATTAATGAGAAGCAATATACTATCAAATGAAATGAAAGCTAAGAATAAAGAT
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GATATCTATCTCAGTCGTCATAACTGTCAGTGTCTCAATTAAGGCTAAGGAAGCTCTAATTGCA
 GCTTCTGAGACTCTCAAAGAAAGGAAAGCTGCAATCAGAGATATAGAAGGAAACTCCCTCAAAGTGAA
 CAAGAATTAAAGGAGAAAGAAAAAGAACTTCAAACTTACACAAGAAGAAACAACTTTAAAGTTTG
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 GTCCTTGATGCAATAATTCAAGAAAAAATCTGGCAGGATTCCAGGAATATATGGAAGATTGGGGGAC
 TTAGGAGCCATTGATGAAAAATACGACGTGGCTATATCATCCTGTTGTCATGCACTGGACTACATTGTT
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 CCTCGTTTATTTGATTTAGTAAAAGTAAAAGATGAGAAAAATTCGCCAAGCTTTTTATTTTCTTTACGA
 GATACCTTAGTAGCTGACAACTTGGATCAAGCCACAAGAGTAGCATATCAAAAAGATAGAAGATGGAGA
 GTGGTAACTTTACAGGGACAAATCATAGAACAGTCAGGTACAATGACTGGTGGTGAAGCAAGTAATG
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 ATAGAGCAAGAAGAATTTTGAATGTCCAAGTTAAGGAACCTGAAGCTAATGTACTTGCTACAGCCCT
 GACAAAAAAGCAGAAATTTGCTAGAAGAAAACGTTAGTGCTTTCAAAACAGAAATATGATGCTGTGGCT
 GAGAAAGCTGGTAAAGTAGAAGCTGAGGTTAAACGCTTACACAATACCATCGTAGAAATCAATAATCAT
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 ACTAAAGCCCAAGTAGCAATCAAGACTGCTGACAGAAACCTTCAAAGGCCAAGACTCTGTCTTGCGT
 ACAGAGAAAGAAATAAAGATACTGAGAAAGAGGTGGATGACCTAACAGCAGAGCTGAAAGTCTTGAG
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 AGTATTAAGTTGAACTTGAACAAATAGATGGTCACATTGCTGAACATAATTCTAAAATAAAATATTGG
 CACAAAGAGATTTCAAAATATCACTGCATCCTATAGAAGATAATCCTATTGAAGAGATTTTCGGTTCTA
 AGCCAGAGGATCTTGAAGCGATCAAGAATCCAGATTCTATAACAAATCAAATTGCACTTTTGAAGCC
 CGGTGTATGAAATGAAACCAACCTCGGTGCCATCGCAGAGTATAAAGGAAGGAAGATTGTATTG
 CAACGGGTAGCAGAAATTGGACAAATTAATGAAATTTATGAGAGACAGTTTATAGACAGGCATATGAAGTCTT
 CGGAAACAAAGGCTTAATGAATTTATGGCAGGTTTTATATAATAACAAATAAATTAAGGAAAATTAC
 CAAATGCTTACTTTGGGAGGGGACGCCAACTCGAGCTTGTAGACAGCTTGGATCCTTTCTCTGAAGGA
 ATCATGTTCAAGTTCGACACCTAAGAAAAGTTGAAAAAGATCTTCAACCTTTGGGAGGAGAGAAA
 ACATTTAGTTCATTGGCTTTAGTATTTGCTCTTCACTACTACAAGCCACTCCCCTTTACTTCATGGAT
 GAGATTGATGCAGCCCTGATTTTAAAAATGTGTCCATTGTTGCATTTTATATATGAACAAACAAAA
 AATGCACAGTTCATAATAATTTCTCTCGAAATAATATGTTTGAGATTCGGATAGACTTATTGGAATT
 TACAAGACATACAACATAACAAAAAGTGTGCTGTAATCCAAAAGAAATTGCATCTAAGGGACTTTGT
 TGA
 ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC

Restriction Sites: Sgfl-MluI

ACCN: NM_001002800

Insert Size: 3867 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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:	<u>NM_001002800.2</u>
RefSeq Size:	5486 bp
RefSeq ORF:	3867 bp
Locus ID:	10051
UniProt ID:	<u>Q9NTJ3</u>
Cytogenetics:	3q25.33
MW:	147.2 kDa
Gene Summary:	This gene belongs to the 'structural maintenance of chromosomes' (SMC) gene family. Members of this gene family play a role in two changes in chromosome structure during mitotic segregation of chromosomes- chromosome condensation and sister chromatid cohesion. The protein encoded by this gene is likely a subunit of the 13S condensin complex, which is involved in chromosome condensation. A pseudogene related to this gene is located on chromosome 2. [provided by RefSeq, Jun 2016] Transcript Variant: This variant (2) is the longest transcript and encodes the longer isoform (1).