

Product datasheet for **MC229370**

Smc5 (NM_001252684) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Smc5 (NM_001252684) Mouse Untagged Clone
Tag: Tag Free
Symbol: Smc5
Synonyms: mKIAA0594; MLZ-453; mSMC5; SMC-5; Smc5I1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC229370 representing NM_001252684
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGACTCCGAGCGGGAAGGCTGCTCCCCCAACCCAGGTTTCCAAGCGGTCTCTCCCGAGAGATG
CTTCTCCGAGGTCCTCGAGCAAGAGAAAGAACTCGAACCCGTTGCCGACGCTGCCCGGCCGTCCTCCGGGAC
CTTCGTCGAGGGCTCAATCGTCCGCATCGCCATGGAGAATCTTAACATATGACATCTGTGAAGTGTCT
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GCCTCGGACTCGCAGGCAAACTGCTTTTCATGGGACGTGCAGATAAGGTTGGGTTTTTTCGTGAAGAGAGG
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TTGAAAGTCAAGAAGATATGGAGATTTTCTCAGAGAGGTTTCGTGACAACAAGAAGTTAAGAGTAAATGC
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TGATGGCACTTCAGGAGCTTAACAGATGTCGGTTCAGAGTAGTCGATGAAATTAATCAGGGTATGGACCC
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TTCATCACACCGAAGCTTCTACAGAATCTTCTTATTCTGAAAAGATGACAGTGTGTTTGTCTACAATG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
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| Restriction Sites: | Sgfl-MluI |
| ACCN: | NM_001252684 |
| Insert Size: | 3306 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: | Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag. |
| 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_001252684.1](#), [NP_001239613.1](#)

RefSeq Size: 5772 bp

RefSeq ORF: 3306 bp

Locus ID: 226026

UniProt ID: [Q8CG46](#)

Cytogenetics: 19 B

Gene Summary: Core component of the SMC5-SMC6 complex, a complex involved in repair of 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 and mediates sumoylation of shelterin complex (telosome) components. Required for sister chromatid cohesion during prometaphase and mitotic progression; the function seems to be independent of SMC6 (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.