

Product datasheet for **SC325391**

SMC6L1 (SMC6) (NM_001142286) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMC6L1 (SMC6) (NM_001142286) Human Untagged Clone
Tag:	Tag Free
Symbol:	SMC6L1
Synonyms:	hSMC6; SMC-6; SMC6L1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC325391 representing NM_001142286. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
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CCTTTAGGAGCTTGCATTCATCTTCGGGACCCAGAACTTGCTTTGGCTATTGAATCTTGCTTAAAAGGG
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Restriction Sites:

SgfI-MluI

ACCN:

NM_001142286

Insert Size:

3276 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: [NM_001142286.1](#)

RefSeq Size: 5275 bp

RefSeq ORF: 3276 bp

Locus ID: 79677

UniProt ID: [Q96SB8](#)

Cytogenetics: 2p24.2

MW: 126.3 kDa

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 (1) represents the longer transcript. Both variants 1 and 2 encode the same protein.