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Product datasheet for MC224070

Smc1b (NM_080470) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smc1b (NM_080470) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Smc1b
Synonyms:	SMC-1B; SMC1beta; Smc1l2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC224070 representing NM_080470 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGGGCACCTTGAGCTGCTGCTCGTGGAGAATTTCAAGTCGTGGCGAGGCCGCCAGGTCATCGGCCCTT TCAAGAGGTTCACCTGCATCATTGGCCCCAACGGCTCCGGAAAATCTAATGTAATGGATGCACTTAGTTT TGTAATGGGAGAAAAGACAACTAATTTAAGAGTAAAAAACATTCAAGAACTTATTCATGGAGCACATACT GGAAAACCTGTTTCTTCTTCTGCAAGTGTGACAATTATATACATAGAGGACAGTGGAGAAGAGAAAACAT TCACAAGGATTATCCGAGGGGGGTGCTCAGAATATCATTTTGGGGATAAACCCGTGAGTCGTTCTGTGTA TGTAGCCCAGTTGGAAAACATAGGCATAATAGTCAAAGCACAGAACTGTCTAGTTTTTCAGGGAACTGTA GAGTCAATATCCATGAAAAAGCCCAAAGAGAGAACCCAGTTTTTTGAAGAAATCAGTACTTCAGGAGAAT TTATAGGAGAATATGAGGCAAAGAAAAAGAAATTACAAAAAGCTGAAGAAGATGCACAATTTCATTTTAA TGTGAAAAAAAATGTAGCTGCAGAACGGAAGCATGCAAAAATAGAGAAAGAAGAGGCAGAACATTACCAA AATCTCCTTGAAGAATTGAAAATAAACAAGATACAACTGATGCTTTTCCAACTATATTATAATGAGGAAA AAATCAATGTTTTAAACACTGAATTAGAGCAAATGGACGGGAATTTAAGTGTTGTAAAAGACACTCTTTC TCACCATGAAAACATATTTAAAGCTAAGAAAAAGGATTATGGAATGTTAACTAGACAACTACAGCAAACA GCAAAAGAACTGAAATCTGTTGAAGCAATTTTAAATCAGAAGAGGCCTCAGTACATTAAGGCTAAAGAAA ACACTTCTCATCATCTAAAAAAATTAGATTTGTCTAAGAAATTGATAACAGACAATGAAAAACAATGTTC TAAGCAGGAAGATGGCATACGAGCCTTAGTGGCAGAACTGGCTGATTTGGATAGAGCATGGAAAAGTTTT GAAAAGCAGATGGAAGAGAAAATCTTACAAAAAGGGCGAGATATTGAATTGGAAAATAGCCAGCTGGATC GTTACAAACTGCTTAAGGAGCAAGTCAGACGGAAGGTTGGTATAATGACACAACAACTGGAAAAACTGCA GTGGGAACAGAAGGCAGAAAAAGAAAGACTTGCATTTGAAAAGAGGAGGCATGGAGACACTCAGGGAAAT CTAAAACAGATAAAAGAACAAATAGAAGAGCATAAAAAACGAATAGAGAAGTTGGAGGAATATACAAAGA CGTGCATGGATTGCTTGGAAGATAAAAAACAGCAAGAAGAGGCCCTGAAAAAAGAAATTGAAAATACGAA ATCAAGAATGTCTGAAGTTAATGAAGAATTGAGTCTTATTAGAAATGAATTGCAGAATGCTGGAATTGAT AACCATGAGGGAAAACGTCAGCAGAAAAGAGCAGAAGTTCTGGAACACCTTAAAAGACTTTACCCAGATT

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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_080470

Insert Size: 3747 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

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_080470.1, NP_536718.1

RefSeq Size: 4056 bp

RefSeq ORF: 3747 bp

Locus ID: 140557

UniProt ID: Q920F6

Cytogenetics: 15 E2

Gene Summary: Meiosis-specific component of cohesin complex. Required for the maintenance of meiotic cohesion, but not, or only to a minor extent, for its establishment. Contributes to axial element (AE) formation and the organization of chromatin loops along the AE. Plays a key role in synapsis, recombination and chromosome movements. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. The meiosis-specific cohesin complex probably replaces mitosis specific cohesin complex when it dissociates from chromatin during prophase I.[UniProtKB/Swiss-Prot Function]