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Product datasheet for MC223961

Smc3 (NM_007790) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smc3 (NM_007790) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Smc3
Synonyms:	Bamacan; Cspg6; HCAP; Mmip1; SMC-3; SmcD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

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>MC223961 representing NM_007790
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTACATCAAGCAGGTGATCATCCAGGGCTTCCGAAGTTACCGAGACCAAACAATTGTAGATCCCTTCA
GCTCCAAACATAATGTCATCGTGGGCAGAAATGGCTCTGGAAAAAGCAACTTCTTTTATGCAATCCAGTT
TGTTCTCAGTGATGAATTCAGCCATCTTCGTCCAGAGCAGCGATTGGCTTTGTTGCATGAGGGTACAGGT
CCTCGTGTTATTTCTGCTTTTGTGGAAATCATTTTTGACAATTCGGACAACCGGTTACCAATTGATAAAG
AGGAAGTTTCACTTCGAAGAGTTATTGGTGCCAAAAAGGATCAGTATTTCCTAGATAAGAAGATGGTCAC
GAAAAATGATGTGATGAATCTCCTTGAAAGTGCTGGGTTTTCCAGAAGTAATCCTTATTACATTGTTAAA
CAAGGAAAGATCAACCAAATGGCAACGGCACCAGATTCTCAGAGATTAAAGCTGTTGAGAGAAGTAGCTG
GTACTAGAGTGTATGATGAACGGAAAGAAGAAAGCATCTCCCTGATGAAAGAAACAGAGGGCAAACGGGA
AAAGATCAATGAGTTGTTGAAGTACATTGAAGAGCGCCTGCACACTCTAGAGGAGGAGAAGGAGGAGCTG
GCCCAGTATCAGAAGTGGGATAAGATGAGGCGCGCCCTGGAGTACACCATCTACAACCAGGAGCTCAACG
AGACGCGCGCTAAGCTCGACGAGCTTTCTGCTAAGCGAGAAACGAGTGGAGAGAAATCCAGACAACTAAG
GGATGCCCAGCAGGATGCAAGAGACAAAATGGAGGATATTGAGCGCCAGGTTAGAGAACTGAAAACAAAA
ATTTCAGCCATGAAAGAAGAAAAAGAACAGCTTAGTGCTGAAAGACAAGAGCAGATTAAGCAAAGGACCA
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GAGGATACCGAGGCAAATAAAGAGAAAAATCTGGAGCAATATAATAAATTGGATCAGGATCTCAATGAAG
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TGAAAGAAATTACTTGTGGAGAGAGGAGAATGCAGAACAACAAGCACTTGCTGCTAAAAGAGAAGACCTT
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GAGAAGAAGCAGCAACTTCTTAGAGCGGCAACAGGAAAGGCCATTTTAAATGGAATAGATAGCATTAACA
AAGTGCTAGAACATTTTCGGCGAAAAGGTATAAACCAGCATGTTCAAAATGGCTACCATGGCATCGTAAT
GAATAACTTTGAGTGTGAACCAGCTTTCTATACTTGTGTGGAAGTCACTGCTGGTAACAGGTTATTTTAT
CACATTGTTGATTCAGATGAAGTCAGCACGAAAATTTTAATGGAGTTCAATAAAATGAATCTTCCTGGAG
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CTCATCTGTCGGAGCATGGAAGTTTCAACTCAGCTGGCCCGGGCCTTCACTATGGACTGTATTACTTTGG
AAGGTGATCAAGTCAGCCATCGAGGTGCTCTGACTGGAGGTTATTACGACACAAGAAAGTCTCGACTTGA
GTTACAGAAAGACGTTAGGAAGGCAGAGGAGGAGCTGGGTGAGCTGGAGGCTAAGCTCAATGAAAACCTA
CGCAGGAACATTGAAAGGATTAATAATGAAATTGACCAGTTGATGAACCAAATGCAGCAGATAGAGACCC
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GCAATCAGAAAAGACCTTCATGCCAAAGCAACGTAGCTTACAAAGCTTGGAGGCAAGTCTGCATGCTATG
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AAGAATTAAACTAGAAGGCATTATTACTCGAGTAGAGACTTACCTGAATGAGAATCTGAGGAAACGCTTG
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CAGAACTTGAAGCTATTAATAAAAGAGTAAAAGATACTATGGCAAGATCAGAAGATTTGGACAATTCCAT
TGACAAAACAGAAGCTGGAATTAAAGAGCTCCAGAAAAGTATGGAGCGCTGGAAAAATATGGAGAAAGAA
CACATGGATGCCATAAATCATGATACTAAAGAGCTGGAGAAGATGACCAACCGGCAAGGCATGCTGTTGA
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AAGAGGAATTGGATAGAGGCTACAAATCAATCATGGAATTGATGAATGTACTTGAACTTAGAAAATATGA
AGCTATTCAGTTAACTTTCAAACAGGTATCTAAGAACTTCAGTGAAGTTTTCCAGAAGTTGGTACCTGGT
GGCAAAGCGACTTTGGTGATGAAGAAAGGAGATGTGGAGGGCAGCCAGTCTCAGGACGAAGGAGAAGGGA
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TCTCTGGTAGCCCTTGCTCTCATCTTTGCCATTCAGAAATGCGACCCTGCTCCTTTTTACCTGTTTGATG
AGATCGACCAAGCTTTGGATGCTCAGCACAGAAAAGCCGTGTCAGATATGATTATGGAGCTAGCCGTGCA
TGCCCAGTTTATTACCACTACTTTCAGGCCTGAACTGCTTGAGTCAGCTGACAAATTCTATGGTGTAAAG
TTCAGAAATAAGGTTAGTCACATTGATGTGATCACAGCAGAGATGGCCAAAGATTTTGTAGAAGACGATA
CCACGCATGGTTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_007790

Insert Size: 3654 bp

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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_007790.3, NP_031816.2

RefSeq Size: 4851 bp

RefSeq ORF: 3654 bp

Locus ID: 13006

UniProt ID: Q9CW03

Cytogenetics: 19 D2

Gene Summary: Central component of cohesin, a complex required for chromosome cohesion during the cell cycle. The cohesin complex may form 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. Cohesion is coupled to DNA replication and is involved in DNA repair. The cohesin complex plays also an important role in spindle pole assembly during mitosis and in chromosomes movement.[UniProtKB/Swiss-Prot Function]

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