

Product datasheet for SC116740

SMC3 (NM_005445) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | SMC3 (NM_005445) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | SMC3 |
| Synonyms: | BAM; BMH; CDLS3; CSPG6; HCAP; SMC3L1 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL5</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >OriGene ORF within SC116740 sequence for NM_005445 edited (data generated by NextGen Sequencing) |

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ATGTACATAAAGCAGGTGATTATCCAGGGTTTTCGAAGTTACAGAGATCAAACAATTGTA
GATCCCTTCAGTTCAAAACATAATGTGATTGTGGGCAGAAATGGATCTGGAAGTAAC
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ACAGGAAAGGCCATTTTAAATGGAATAGACAGCATAAACAAAGTCTAGACCACTTCCGT
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GAGTCAGCTGACAAATTCATGGTGTAAAGTTCAGAAAATGAGTTAGTCATATTGATGTG
ATCACAGCAGAGATGGCCAAAGACTTTGTAGAAGATGATACCACACATGGTTAA

Clone variation with respect to NM_005445.3

3039 a=>g

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| 5' Read Nucleotide Sequence: | <p>>OriGene 5' read for NM_005445 unedited</p> <pre>TGTAATACGACTCACTTATAGGGCGGCCGCAATTTCGCACGAGGGGGAGGGGTCCGCTAG GCGCCTCACCTGACCCTGCGGCCGTGCGGTTGCTGCTCCGGGGCAGGTCTCCTCCAGGC CAGGGGCCCGGAATCATGTACATAAAGCAGGTGATTATCCAGGGTTTTCGAAGTTACAGA GATCAACAATGTAGATCCCTTCAGTTCAAAACATAATGTGATTGTGGGCAGAAATGGA TCTGGAAAAAGTAACTTTTTTATGCAATTCAGTTTGTCTCAGTGATGAGTTTAGTCATC TTCGTCCAGAACAGCGGTTGGCTTTATTGCATGAAGGTAAGTACTGGTCTCGTGTATTCTG CTTTTGTGGAGATTATTTTTGATAATTCAGACAACCGGTTACCAATCGATAAAGAGGAAG TTTCACCTCGAAGAGTTATTGGTGCCAAAAAGGATCAGTATTTCTAGACAAGAAGATGG TCACGAAAAATGATGTGATGAACCTCCTTGAAAGCGCTGGTTTTCTCGAAGCAATCCTT ATTATATTGTTAAACAAGGAAAGATCAACCAGATGGCAACAGCACCAGATTCTCAGAGAT TAAAGCTATTAAGAGAAGTAGCTGGTACTAGAGTGTATGACGAACGAAAGGAAGAAAGCA TCTCCTTAATGAAAGAACAGAGGGCAAACGGGAAAAATCAATGGAGTTGTTAAAATACA TTGAAGAGAGATTACATACTCTAGAGGAAGAAAANGAAGAACTAGCTCAGTTNCAGAAGTG GGATANAATGAGACGAGCCCTGGNATATACCATTTACAATCAGAACTTACGAGACTCGTG CCAACCTGATGAGCTTTCTGCTAGCGAGAGACTAGTGGAGAANAATCCAGACATTAGAGA TGCTCAGC</pre> |
| 3' Read Nucleotide Sequence: | <p>>OriGene 3' read for NM_005445 unedited</p> <pre>GCGGGCCCAATCTAGNATCGAGTTTTTTTTTTTTTTTTTTTTAGTCATAAAACCGATTATT TAATTGAAGCTATAAAAAAGGTAGTATAAGTGATAAAAATAATTAGGAAAGAATATTTAGC ATGTTTCAAACATTTAAATAGGAGCAGAACATTTTACAAAAGTTGTACAGGAAATTA AATTCTTAAACTATCAGTACAAACATGACATTACAGAGTATCTTATAAAATACAAAGACA AATATAAAGGACTATGATGCTTTAAGTCTGAAAACATTTGGCCAAATATTTAGGTTTAA ATTTACAGTTCCTGGGTATGAGAATCATATTACTATATACATCTCCCAAACCAAGTAGGTA GTATTTTCCAATTAACCATGTGTGGTATCATCTTCTACAAAGTCTTTGGCCATCTCTGCT GTGATCACATCAATATGACTAACCTTATTTCTGAACTTTACACCATAGAATTTGTGACGT GACTCAAGCAGTTCAGGCCTAAAAGTAGTTGTAATAAACTGAGCATGTACAGCAAGTTC ATAATCATATCTGACACAGCCTTTCTGTGCTGAGCATCCAGAGCCTGGTCAATTTTCATCA AACAGTAAAAATGGAGCCGGGTACATTTCTGAATGGCANAAATCAGAGCAAGGGCTACC AAGGATTTCTGTCCACCTGAAAAGCTGTGCATTNCTCTCATTTCACCTGTTTTCTGGA AATGACACCCTAATTCAACTCCAGTAACTGTTCAACTGATGGGACACTGCTTTGTGAG CCANAACCCCTNTNNACTTTACCACTNCCTTTNTNCTTATCTTGAAGACTGACTGGCC TCCACATTTCTTTCTTTATACCAAAGTAGCTTTGCCACCAGGTAACCTTCTGGGAT ACTTCACTTGAGTTCCTANATAACTGGTTGAAGNTTACTGGAATACCTCATATTTCCGA GGTTCAGGACCTCCTA</pre> |
| Restriction Sites: | NotI-NotI |
| ACCN: | NM_005445 |
| Insert Size: | 4700 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). |
| 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). |

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| Reconstitution Method: | <ol style="list-style-type: none">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_005445.3 , NP_005436.1 |
| RefSeq Size: | 4131 bp |
| RefSeq ORF: | 3654 bp |
| Locus ID: | 9126 |
| UniProt ID: | Q9UQE7 |
| Cytogenetics: | 10q25.2 |
| Domains: | SMC_N, SMC_C |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Cell cycle, Oocyte meiosis |
| Gene Summary: | <p>This gene belongs to the SMC3 subfamily of SMC proteins. The encoded protein occurs in certain cell types as either an intracellular, nuclear protein or a secreted protein. The nuclear form, known as structural maintenance of chromosomes 3, is a component of the multimeric cohesin complex that holds together sister chromatids during mitosis, enabling proper chromosome segregation. Post-translational modification of the encoded protein by the addition of chondroitin sulfate chains gives rise to the secreted proteoglycan bamacan, an abundant basement membrane protein. [provided by RefSeq, Jul 2008]</p> |