

Product datasheet for **MC223354**

Smarca5 (NM_053124) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smarca5 (NM_053124) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Smarca5
Synonyms:	4933427E24Rik; D030040M08Rik; D330027N15Rik; MommeD4; Snf2h
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223354 representing NM_053124 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCGTCGGCGGTGGAGCCTCCGCCGCCCGCCTCCCGAGAGCGCGCCTTCCAAGCCCTCGGCGGCGG
GCGCCGGCGGGAGCAGCAGCGGCAACAAAGCGGCCCGAGGGCGGCGCGGCCCGCGGCTCCGTGTGC
TCCGGGCTCGGGCCCGCGGACACCGAGATGGAGGAAGTATTTGATCATGGATCACCTGGAAGCAAAAA
GAAATCCAAGAACCAGATCCTACATATGAAGAAAAATGCAAAGTACCGAGCAAATAGATTTGAGTATT
TATTAAGCAGACAGAGCTGTTCCGACATTTTCATTAGCCTGCTGCTCAGAAGACTCCAACCTCACCCCT
GAAGATGAAACCAGGGCGCCACGGGTAAGGATGAAAAACAGAATTTGCTTTCAGTTGGAGATTAC
CGACACCGTAGAACGGAGCAAGAGGAGGATGAAGAGCTATTAACAGAAAGTTCCAAGCAACTAATGTTT
GTACTCGATTTGAAGATTCTCCATCATATGTAAGTGGGGTAACTGAGAGATTATCAGGTGCGAGGATT
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ACACTTCAAACAATTTCTCTTGGATACATGAAACACTATAGAAATATTCCTGGTCTCATATGGTTT
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TTGCTTGATAGGAGATAAAGAGCAAGAGCTGCATTTGTCAGGGATGTTTTATTACCAGGAGAGTGGGAT
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AACTTTTTGTTACCAGATGTGTTAATTCAGTGTGACTTTGATTCTGGTTTGATACAATAATTGCC
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GGCTATTGAACATTTTGATGCAGTTGAGGAAATGCTGCAATCATCCTTATCTCTTCGATGGAGCTGAACC
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CTCCCTAAACTGAAAGAACAAGTTCAAGAGTACTAATCTTTAGTCAGATGACAAGAGTATTAGACATTT



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TGGAAGATTATTGCATGTGGAGAAATTATGAGTACTGCAGTTGGATGGACAGACACCCCATGATGAGAG
ACAAGACTCCATCAATGCATACAATGAACCAAATAGCACAAAGTTTGTATTTATGCTAAGCACACGTGCT
GGTGGTCTGGGCATCAATCTTGCAACTGCTGATGTAGTCATTTTATATGACTCAGATTGGAATCCGCAAG
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AACTGATAACACTGTGGAAGAAAGAATAGTGGAACGTGCTGAGATGAACTTAGACTGGATTTCGATAGTA
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CAAAGAAGAAATAGTATCAAGAAAGCACTAGATACAAAGATTGGACGGTACAAAGCACCCCTTTCATCAGC
TAAGAATATCATATGGTACTAACAAAGGAAAAAATACTGAAGAAGAGGATCGTTTTCTCATTGTAT
GCTGCACAAGCTTGGCTTCGACAAGGAAAAATGTGTATGATGAATTACGACAATGCATCCGAACTCCCCT
CAGTTTAGATTTGATTGGTTTCTCAAGTCCAGAAGTCCGATGGAGCTCCAGAGGAGGTGTAATACCTTAA
TTACTTTGATTGAAAGAGAAAAATGGAAGTGAAGAAAAGGAGAAGGCAGAGAAAAAGAAAAGAGGACC
AAAACCTCCACACAGAAACGTAAGATGGACGGTCCCCCTGATGGCCGTGGAAGAAAAAGAAAGCTGAAA
CTATGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-MluI
ACCN:	NM_053124
Insert Size:	3156 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).
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:	<u>NM_053124.2</u> , <u>NP_444354.2</u>
RefSeq Size:	4658 bp

RefSeq ORF: 3156 bp

Locus ID: 93762

UniProt ID: [Q91ZW3](#)

Cytogenetics: 8 C2

Gene Summary: Helicase that possesses intrinsic ATP-dependent nucleosome-remodeling activity. Complexes containing SMARCA5 are capable of forming ordered nucleosome arrays on chromatin; this may require intact histone H4 tails. Also required for replication of pericentric heterochromatin in S-phase specifically in conjunction with BAZ1A. Probably plays a role in repression of polII dependent transcription of the rDNA locus, through the recruitment of the SIN3/HDAC1 corepressor complex to the rDNA promoter. Essential component of the WICH complex, a chromatin remodeling complex that mobilizes nucleosomes and reconfigures irregular chromatin to a regular nucleosomal array structure. The WICH complex regulates the transcription of various genes, has a role in RNA polymerase I and RNA polymerase III transcription, mediates the histone H2AX phosphorylation at 'Tyr-142', and is involved in the maintenance of chromatin structures during DNA replication processes. Essential component of the NoRC (nucleolar remodeling complex) complex, a complex that mediates silencing of a fraction of rDNA by recruiting histone-modifying enzymes and DNA methyltransferases, leading to heterochromatin formation and transcriptional silencing.[UniProtKB/Swiss-Prot Function]