

Product datasheet for **MC224711**

Smarca2 (NM_011416) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Smarca2 (NM_011416) Mouse Untagged Clone
Tag: Tag Free
Symbol: Smarca2
Synonyms: 2610209L14Rik; brahma; brm; SNF2alpha; Snf2l2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224711 representing NM_011416
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGTCCACACCCACAGACCCAGCAGCAATGCCCATCCTGGGCCCTCCCCGGGGCCTGGACCCTCTCCTG
GACCAATTCTGGGGCCTAGTCCAGGACCAGGACCATCCCCAGTTCTGTGCACAGCATGATGGGTCTAG
TCCCGGACCTCCCAGCGTCTCACATCCTCTGTCAACGATGGGCTCTGCAGACTTCCACAGGAAGGCATG
CACCAATTACATAAGCCCATGGATGGGATACATGACAAAGGGATTGTAGAAGATGTCACACTGTGGATCCA
TGAAGGGCACCAGCATGGCCCCCACACCCAGGAATGGGCCCTCCACAGAGCCCCATGGACCAGCACAG
CCAAGTTATATGTCACCACATCCGTCTCCTCTGGGAGCCCCGGAGCACGTCTCTAGCCCTATATCTGGA
GGAGGCCCAACCCACCCAGATGCCACCAGCCAGCCAGGGGCACTCATCCCAGGAGATCCGCAGGCCA
TGAACCAGCCTAACAGAGGTCCCTCGCCTTTAGTCTGTGCAGCTGCATCAGCTTCGAGCTCAGATTTT
AGCTTACAAAATGTTGGCCAGGGGCCAGCCTCTCCCTGAAACTCTGCAGCTGGCAGTCCAGGGAAAAAGG
ACCTTGCTGGCATGCAGCAGCAGCAGCAACAACAACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC
AGCAACAGCAGCAACAACAGCAGCCCCAGCAGCCTCAGCAGAGGCTCAGGCACAGCCCCAGCAGCAGCA
GCAACAGCAGCAGCAGCCAGCTCTGTTAGCTATAATCGACCATCTGGCCCCGGGAGGAGCTGCTACTG
AGTGGCCAGAGCGCTCCGCAGAAGCTGTGACACCAGCACCAAGCGGCCGACCTTACCAGCACCCAGG
CCGCCGTCAGCCACGGCCACAGCGGTGCCCGGGCCCTCCGTGCAGCAGCCCGCCAGGGCAGCCGTC
TCCGGTCTACAGCTGCAACAGAAGCAGAGCCGCATCAGCCCCATCCAGAAACCGCAAGGCTGGACCCG
GTGGAGATCCTGCAGGAACGAGAGTACAGACTTCAAGCTCGCATCGTCTATAGGATACAAGAACTGGAAA
GTCTGCCTGGTTCCTTGGCACCAGATTTACGCACCAAGCAACCGTGGAACTGAAAGCACTTCGCTTACT
CAACTTCAAACGTCAGCTGAGACAGGAGGTGGTGGCCTGCATGCGGAGGGACACCACCCTGGAGACGGCC
CTCAACTCAAAGCATATAAGCGGAGCAAGCGCCAGACCCTGCGTGAGGCACGCATGACAGAGAACTGG
AGAAGCAGCAGAAGATAGAACAGGAGAGGAAACCGCGGCAGAAACACCAGGAATACCTGAACAGTATTTT
GCAACATGCAAAAAGATTTAAGGAATATCACCGGTCTGTGGCCGGGAAGATCCAGAAGCTCTCAAAGCA
GTGGCGACTTGGCATGCTAACACAGAAAGGGAGCAGAAGAAGGAGACGGAGCGGATCGAGAAGGAGAGAA



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TGCGGAGGCTGATGGCCGAAGATGAAGAGGGCTACAGGAAGCTTATTGACCAAAAAGAAAGACAGACGTCT
 CGCCTACCTATTGCAGCAGACCGATGAGTATGTCGCAATCTGACCAACCTGGTGTGGGAGCACAAGCAG
 GCCAAGCAGCCAAGAGAAGAAGAAGAGGAGGAGGAGGAAGAAGAAGGCTGAAGAGAATGCAGAGGGAG
 GGGAACTGCCCTGGGACCAGATGGAGAGCCAATAGATGAAAGCAGCCAGATGAGTGACCTGCCTGTCAA
 AGTGACACACAGAACTGGCAAGTCTCTTTGGACCAGAAGCACCAAAAGCAAGTCACTGGATGCC
 TGGCTGGAGATGAATCCTGGTTACGAAGTTGCACCCAGATCTGACAGTGAAGAGAGTGAATCGGATACG
 AGGAGGAGGATGAAGAAGAAGAGTCCAGTAGGCAGGAAACCGAGGAGAAGATACTGCTGGATCCCAACAG
 TGAAGAAGTTTCCGAAAAGGATGCCAAGCAGATCATTGAGACTGCGAAGCAGGACGTGGACGACGAATAC
 AGCATGACGTACAGTGCCAGAGGCTCTCAGTCCTACTACACGGTGGCTCACGCTATCTCTGAGAGGGTGG
 AGAAGCAGTCTGCCCTCCTCATTAAACGGCACCCCTAAAGCATTACCAGCTCCAGGGCCTGGAATGGATGGT
 TTCCCTGTATAATAACAATCTGAACGGAATCTTAGCTGATGAAATGGGGCTAGGCAAGACCATCCAGACC
 ATTGCACTCATCAGTATCTGATGGAGCACAAAAGGCTCAATGGTCCCTACCTCATCATCGTCCCCTCT
 CGACTCTGTCTAACTGGACATATGAATTTGACAAATGGGCTCTTCTGTGGTAAAAATTTCTTACAAGG
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 TACGAGTACATTATAAAGACAAGCACATTCTTGCAAAGATTCGGTGAAGTACATGATCGTGGACGAAG
 GCCACCGGATGAAGAATCACCCTGCAAGCTAACCAGGCTCTGAACACACACTATGTGGCCCCAGGCG
 GATCCTTCTGACTGGGACCCCACTGCAGAATAAGCTTCCGGAACCTCTGGGCCCTCTCAACTTCTCCTC
 CCTACAATCTTCAAGAGTTGCAGCACATTTGAGCAGTGGTTAATGCTCCATTTGCCATGACCGGTGAAA
 GGGTGGACCTGAACGAAGAAGAAACGATTTTGATCATCAGGCGTCTACACAAGGTGCTGAGACCTTTTT
 ACTGAGGAGGCTGAAGAAAGAGGTTGAGTCTCAGCTTCCGAAAAGGTTGAGTATGTGATCAAGTGTGAC
 ATGTGACGCTCTGCAGAAGATTCTGTACCGTACATGCAAGCCAAGGGGATCCTCCTCACGGACGGGCTG
 AGAAAGATAAGAAGGGGAAAGGAGGTCCAAGACACTTATGAACACCATCATGCAGTGAAGAAAAATG
 CAACCCCATATATGTTTCAGCACATTGAGGAATCCTTTGCTGAACACCTGGGCTATTCGAATGGGGT
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 GAGCGACTAACCCCGCTGCTGCTTTTCTGCCAGATGACGCTCACTCATGACCATTATGGAGGATTACTT
 TGCTTTTCGGAACCTCCTGTACCTGCGCCTTGACGGCACCAAGTCTGAAGATCGTGCTGCTTTGCTA
 AAGAAATCAATGAACCTGGGTCCAGTATTTCAATTTTCTTGCTGAGCACAAGAGCAGGGGGCTGGGCT
 TAAATCTCAGGCGCAGACACGGTGGTCAATTTGACAGCGACTGGAATCCTCACCAGGATCTGCAGGC
 CCAAGACCGAGCTCACCGCATTGGCCAACAAAACGAGGTCGGGTGCTGAGGCTTTCACCGTCAACAGT
 GTGGAGGAAAAGATTCTCGCGGCTGCCAAGTACAAGTGAACGTGGATCAGAAGTTATCCAAGCAGGCA
 TGTTTGACCAGAAGTATCCAGCCACGAGCGGAGGGCCTTCTGCAGGCCATTCTGGAGCACGAGGAGGA
 GAATGAGGAAGAAGATGAGGTACAGACACGAGACCCTGAACCAGATGATTGCTCGCCGGGAGGAAGAA
 TTTGATCTTTTTATGCGCATGGACATGGACCGGCGGAGGGAGGATGCCCGGAACCCGAAGCGCAACCCC
 GCTTGTGAGGGAAGATGAGCTGCCCTCCTGGATTATCAAGGATGACGCCGAAGTGGAAAGGCTCACCTG
 TGAAGAAGAGGAGGAGAAGATAATTTGGGAGGGGCTCTCGCCAGCGCCGGGATGTGGACTACAGTATGCC
 CTCACCGAGAAGCAATGGCTCAGGGCCTCGAAGACGGCAATTTGGAAGAAATGGAAGAGGAGGTACGGC
 TTAAGAAGAGAAAAGACGAAGAATGTGGATAAAGACCCCGTGAAGGAAGATGTGGAAGAGGAGGAGGAA
 AAGAAGAGGCGCCCTCCGGCTGAGAAGTTGTCACCAAATCCCCAAAACCTAACGAAGCAGATGAACGCC
 ATCATTGATACTGTGATAAACTACAAGACAGTTCAGGGCGACAGCTCAGTGAAGTCTTCATTGATTAC
 CTTCCAGGAAAGACTTACCAGAATACTATGAATTAATTAGGAAGCCAGTGGATTTCAAAAAGATAAAGGA
 GCGAATCCGTAATCATAAGTATCGGAGCCTGGGAGACCTGGAGAAAGACGTCATGCTTCTGTCAAC
 GCACAGACATTCAACTTGAAGGATCCCAGATCTACGAAGACTCCATTGTCTACAGTCACTGTTTAAAG
 GTGCTCGGCAGAAAATTGCCAAAGAAGAAGAGAGTGAAGGAAAGCAATGAAGAAGAGGAAGAAGATGA
 TGAAGAGGAGTCGGAGTCAGAGGCGAAATCTGTGAAGGTGAAAATCAAGCTGAATAAAAAGGAAGAGAAA
 GGCCGGGACACAGGGAAGGGCAAGAAGCGGCCAAACCGAGGCAAGCCAAACCCGTCGTGAGCGATTTTG
 ACAGTGACGAGGAACAGGAAGAGAACGAACAGTCAAGAAGCAAGTGAAGTGAACGATAACGAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-MluI

ACCN:

NM_011416

Insert Size:	4752 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:	NM_011416.2 , NP_035546.2
RefSeq Size:	5831 bp
RefSeq ORF:	4752 bp
Locus ID:	67155
UniProt ID:	Q6DIC0
Cytogenetics:	19 21.17 cM
Gene Summary:	<p>Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Component of SWI/SNF chromatin remodeling complexes that carry out key enzymatic activities, changing chromatin structure by altering DNA-histone contacts within a nucleosome in an ATP-dependent manner. Binds DNA non-specifically (PubMed:22952240, PubMed:26601204). Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a postmitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to postmitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the self-renewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth.</p> <p>[UniProtKB/Swiss-Prot Function]</p>