

Product datasheet for RC216222

SMARCA2 (NM_003070) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMARCA2 (NM_003070) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SMARCA2
Synonyms:	BAF190; BIS; BRM; hBRM; hSNF2a; NCBRS; SNF2; SNF2L2; SNF2LA; Sth1p; SWI2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216222 representing NM_003070 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCACGCCACAGACCCTGGTGGCATGCCCAACCAGGGCCTTCGCCGGGGCCTGGGCCTTCCCCTG
GGCCAATCTTGGGCCTAGTCCAGGACCAGGACCATCCCCAGGTTCCGTCCACAGCATGATGGGGCCAAG
TCCTGGACCTCCAAGTGTCTCCCATCTATGCCGACGATGGGGTCCACAGACTTCCCACAGGAAGGCATG
CATCAAATGCATAAGCCCATCGATGGTATACATGACAAGGGGATTGTAGAAGACATCCATTGTGGATCCA
TGAAGGGCACTGGTATGCGACCCTCACCCAGGCATGGGCCCTCCCCAGAGTCCAATGGATCAACACAG
CCAAGTTATATGTCACCACACCCATCTCCATTAGGAGCCCCAGAGCACGTCTCCAGCCCTATGTCTGGA
GGAGGCCCAACTCCACCTCAGATGCCACCAAGCCAGCCGGGGGCCCTCATCCCAGGTGATCCGCAGGCCA
TGAGCCAGCCCAACAGAGGTCCCTCACCTTTCAGTCTGTCCAGTGCATCAGCTTCGAGCTCAGATTTT
AGCTTATAAAATGCTGGCCCCGAGGCCAGCCCTCCCCGAAACGCTGCAGCTTGCAGTCCAGGGGAAAAGG
ACGTTGCCTGGCTTGAGCAACAACAGCAGCAGCAACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC
AGCAGCAACAGCAGCCGAGCAGCAGCCGCCGCAACCACAGACGAGCAACAACAGCAGCCGGCCCTTGT
TAACTACAACAGACCATCTGGCCCGGGCCGGAGCTGAGCGGCCCGAGCACCCCGCAGAAGCTGCCGGTG
CCCCGCCCGGGCGGCCCTCGCCCGGCCCCCGCAGCCGCGCAGCCGCCCGCCGAGTGGCCCG
GGCCCTCAGTGCCGAGCCGGCCCGGGGCGAGCCCTCGCCGTCTCCAGCTGCAGCAGAAGCAGAGCCG
CATCAGCCCATCCAGAAACCGCAAGGCCTGGACCCCGTGGAAATTCGCAAGAGCGGGAATACAGACTT
CAGGCCCGCATAGCTCATAGGATACAAGAACTGGAAAATCTGCCTGGCTCTTTGCCACCAGATTTAAGAA
CCAAAGCAACCGTGGAATAAAAGCACTTCGGTTACTCAATTTCCAGCGTCAGCTGAGACAGGAGGTGGT
GGCCTGCATGCGCAGGGACAGACCCTGGAGACGGCTCTCAACTCAAAGCATACAAACGGAGCAAGCGC
CAGACTCTGAGAGAAGCTCGCATGACCGAGAAGCTGGAGAAGCAGCAGAAGATTGAGCAGGAGAGGAAAC
GCCGTGAGAAACACCAGGAATACCTGAACAGTATTTGCAACATGCAAAAGATTTAAGGAATATCATCG
GTCTGTGGCCGAAAGATCCAGAAGCTCTCAAAGCAGTGGAACCTTGGCATGCCAACACTGAAAGAGAG



[View online >](#)

CAGAAGAAGGAGACAGAGCGGATTGAAAAGGAGAGAATGCGGCGACTGATGGCTGAAGATGAGGAGGGTT
 ATAGAAAAGTATTGATCAAAAGAAAGACAGGCGTTTAGCTTACCTTTTGCAGCAGACCGATGAGTATGT
 AGCCAATCTGACCAATCTGGTTTGGGAGCACAAGCAAGCCAGGCAGCCAAAGAGAAGAAGAAGAGGAGG
 AGGAGGAAGAAGAAGGCTGAGGAGAATGCAAGAGGGTGGGAGTCTGCCCTGGGACCGGATGGAGAGCCCA
 TAGATGAGAGCAGCCAGATGAGTGACCTCCCTGTCAAAGTGACTCACACAGAAACCGGCAAGGTTCTGTT
 CGGACCAGAAGCACCCAAAGCAAGTCAGCTGGACGCTGGCTGGAATGAATCCTGGTTATGAAGTTGCC
 CCTAGATCTGACAGTGAAGAGAGTGATTCTGATTATGAGGAAGAGGATGAGGAAGAAGAGTCCAGTAGGC
 AGGAAACCGAAGAGAAAATACTCCTGGATCCAAATAGCGAAGAAGTTTCTGAGAAGGATGCTAAGCAGAT
 CATTGAGACAGCTAAGCAAGACGTGGATGATGAATACAGCATGCAGTACAGTGCCAGGGGCTCCAGTCC
 TACTACACCGTGGCTCATGCCATCTCGGAGAGGGTGGAGAAAACAGTCTGCCCTCCTAATTAATGGGACCC
 TAAAGCATTACCAGCTCCAGGCGCTGGAATGGATGGTTTCCCTGTATAATAACAACCTGAACGGAATCTT
 AGCCGATGAAATGGGCTTGGAAAGACCATACAGACCATTGCACTCATCACTTATCTGATGGAGCACAAA
 AGACTCAATGGCCCTATCTCATATTGTTCCCTTTGACTCTATCTAACTGGACATATGAATTTGACA
 AATGGGCTCCTTCTGTGGTGAAGATTTCTACAAGGGTACTCCTGCCATGCGTCGCTCCCTTGCCCCCA
 GCTACGGAGTGGCAAATCAATGTCCTTGTACTACTTATGAGTATATTATAAAAGACAAGCACATTCTT
 GCAAAGATTTCGGTGGAAATACATGATAGTGGACGAAGGCCACCGAATGAAGAATCACCACTGCAAGCTGA
 CTCAGGCTTGAACACTCACTATGTGGCCCCAGAAAGGATCCTCTTGACTGGGACCCCGTGCAGATAA
 GCTCCCTGAACCTGCGGCCCTCCTCAACTTCTCCTCCCAACAATTTTTAAGAGCTGCAGCACATTTGAA
 CAATGGTTCAATGCTCCATTTGCCATGACTGGTGAAGGGTGGACTTAAATGAAGAAGAACTATATTGA
 TCATCAGGCGCTACATAAGGTGTTAAGACATTTTTACTAAGGAGACTGAAGAAAGAAGTTGAATCCCA
 GCTTCCCGAAAAGTGAATATGTGATCAAGTGTGACATGTCAGCTCTGCAGAAGATTCTGTATCGCCAT
 ATGCAAGCCAAGGGGATCCTTCTCACAGATGGTCTGAGAAAGATAAGAAGGGGAAAGGAGGTGCTAAGA
 CACTTATGAACACTATTATGCAGTTGAGAAAAATCTGCAACCACCCATATATGTTTCAGCACATTTGAGGA
 ATCCTTTGCTGAACACTAGGCTATTCAAATGGGGTCAATGGGGTGAAGTGTATCGGGCTCAGGG
 AAGTTTGAGCTGCTTGTATCGTATTCTGCCAAAATTGAGAGCGACTAATCACCGAGTGCTGCTTTTCTGCC
 AGATGACATCTCTCATGACCATCATGGAGGATTATTTGCTTTTTCGAACTTCTTTACCTACGCTTGA
 TGGCACCACCAAGTCTGAAGATCGTGCTGCTTTGCTGAAGAAATCAATGAACCTGGATCCAGTATTTT
 ATTTTCTGCTGAGCACAAAGAGCTGGTGGCCTGGGCTTAAATCTTCAGGCAGCTGATACAGTGGTATCT
 TTGACAGCGACTGGAATCCTCATCAGGATCTGCAGGCCAAGACCGAGCTCACCGCATCGGGCAGCAGAA
 CGAGGTCCGGTACTGAGGCTCTGTACCGTGAACAGCGTGGAGGAAAAGATCCTCGGGCCGCAAAAATAC
 AAGCTGAACGTGGATCAGAAAGTATCCAGGCGGCATGTTTGACAAAAGTCTTCAAGCCACGAGCGGA
 GGGCATTCTGCAAGCCATCTTGAGCATGAGGAGGAAAATGAGGAAGAAGATGAAGTACCGGACGATGA
 GACTCTGAACCAATGATTGCTCGACGAGAAGAAGAATTTGACCTTTTTATGCGGATGGACATGGACCGG
 CGGAGGGAAGATGCCCGGAACCCGAAACGGAAGCCCGTTTAAATGGAGGAGGATGAGCTGCCCTCCTGGA
 TCATTAAGGATGACGCTGAAGTAGAAAGGCTCACCTGTGAAGAAGAGGAGGAGAAAATATTTGGGAGGGG
 GTCCCGCCAGCGCGTACAGTGGACTACAGTGACGCCCTCACGGAGAAGCAGTGGCTAAGGGCCATCGAA
 GACGGCAATTTGGAGGAAATGGAAGAGGAAGTACGGCTTAAAGAAGCGAAAAAGACGAAGAATGTGGATA
 AAGATCCTGCAAAAAGAAGATGTGAAAAAGCTAAGAAGAGAAGAGGCCCGCTCCCGCTGAGAACTGTC
 ACCAAATCCCCCAAACGACAAAAGCAGATGAACGCTATCATCGATACTGTGATAAACTACAAAGATAGG
 TGTAACTGGAGAAGGTGCCAGTAATTCAGTTGGAATAGAAGGAAACAGTTACGGGACAGCTCA
 GTGAAGTCTTCATTAGTTACCTTCAAGGAAAAGATTACAGAATACTATGAATTAATTAGGAAGCCAGT
 GGATTTCAAAAAAATAAAGGAAAGGATTCGTAATCATAAGTACCGGAGCCTAGGCGACCTGGAGAAGGAT
 GTCATGCTTCTGTGACAACGCTCAGACGTTCAACCTGGAGGGATCCCAGATCTATGAAGACTCCATCG
 TCTTACAGTCAGTGTAAAGAGTCCCGGCAGAAAATTGCCAAAGAGGAAGAGAGTGAAGATGAAAGCAA
 TGAAGAGGAGGAAGAGGAAGATGAAGAAGAGTCAAGTCCGAGGCAAAATCAGTCAAGGTGAAAATTAAG
 CTCAATAAAAAAGATGACAAAGGCCGGGACAAAGGAAAGGCAAGAAAAGGCCAAATCGAGGAAAAGCCA
 AACCTGTAGTGAGCGATTTTACAGCGATGAGGAGCAGGATGAACGTGAACAGTCAAGGAAGTGGGAC
 GGATGATGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216222 representing NM_003070
 Red=Cloning site Green=Tags(s)

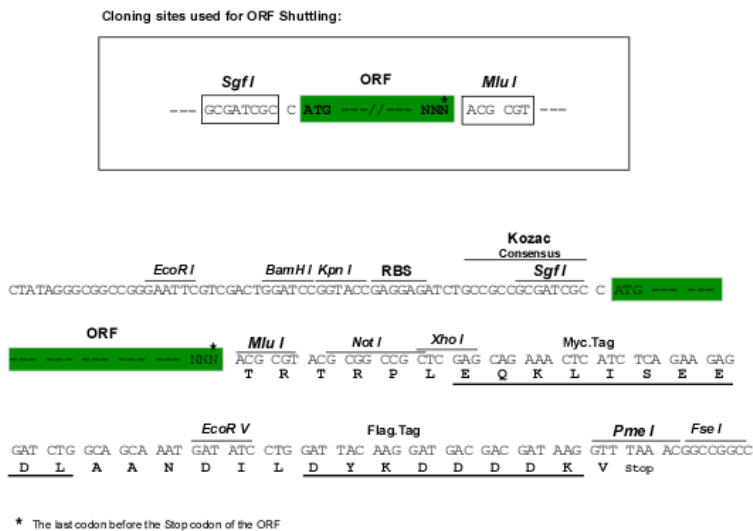
MSTPTDPGAMPHPGPSPGPGSPGPILGSPSPGPGSPGVSMMGSPGPPSVSHPMPTMGSTDFPQEGM
 HQMHKPIDGIHDKGIVEDIHCGSMKGTGMRPPHPGMGPPQSPMDQHSQGYMSPHPSPGLAPEHVSSPMSG
 GGTPPQMPPSQPGALIPGDPQAMSQPNRGPSPFSPVQLHLQRAQILAYKMLARGQPLPETLQLAVQGKR
 TLPGLQQQQQQQQQQQQQQQQQQQQQQPPQPPQPTQQQQQPALVNYNRPSPGPEL SGPSTPQKLPV
 PAPGGRPSAPPAAAQPPAAAVPGPSVPQAPGQPSPVLQLQQKQSRISPIQKPKQLDPVEILQEREYRL
 QARIAHRIQELENLPGSLPPDLRTKATVELKALRLLNFQRQLRQEVVACMRDDTLETALNSKAYKRSKR
 QTLREARMTEKLEKQKQIEQERKRRQKHQEYLSILQHAKDFKEYHRSVAGKIQKLSKAVATWHANTERE
 QKKETERIEKERMRLMAEDEEGYRKLIDQKKDRRLAYLLQQTDEYVANL TNLVWEHKQAQAAKEKKRRR
 RRRKKAENAEGGESALGPDGEPIDESSQMSDLPVKVTHTETGKVLFGPEAPKASQLDAWLEMNPGYEVA
 PRSDSESDSYEEDEEEESSRQETEEKILLDPNSEEVSEKDAKQI IETAKQDVDEYSMQYSARGSQS
 YYTVAHAISERVEKQSALLINGTLKHYQLQGLEWMVSLYNNNLNGILADEMGLGKTIQTIALITYLMEHK
 RLNGPYLIIIVPLSTLSNWTYEFDKWAPSVVKISYKGPAMRRSLVPQLRSGKFNVLTTTYEYIIKDKHIL
 AKIRWKYMIIVDEGHRMKNHHCKLTQVLNTHYVAPRRILLTGTPLNKLPWALLNLFLLPTIFKSCSTFE
 QWFNAPFAMTGERVDLNEETILIIIRLHKVLRPFLRRLKKEVESQLPEKVEYVIKCDMSALQKILYRH
 MQAKGILLTDGSEKDKKGGAKTLMNTIMQLRKICNHPYMFQHIIEESFAEHLGYSNGVINGAELYRASG
 KFELLDRIPLKLRATNHRVLLFCQMTSLMTIMEDYFAFRNFLYLRLDGTGKSEDRAALLKFNPEGSQYF
 IFLLSTRAGGLNLQAADTVVIFDSDWNPHQDLQAQDRAHRIGQQNEVRVLRCLTVNSVEEKILAAKY
 KLNVDQKVIQAGMFDQKSSSHERRAFLQAILHEEENEDEEVPDDELNQMIARREEFDLFRMDMDR
 RREDARNPKRKRPRLMEDELPSWIIKDDAEVERLTCEEEEEKIFGRGSRQRDQVSDALTEKQWLRRAIE
 DGNLEEMEEVRLKRRRRRNVKDPKEDVEKAKRRRGRPPAEKLSNPPKLTQMNAIIDTVINYKDR
 CNVEKVPNSQLEIEGNSGRQLSEVFIQLPSRKELPEYYELIRKPVDFKKIKERIRNHKYRSLGDLEKD
 YMLLCHNAQTFNLEGSQIYEDSIVLQSVFKSARQKIAKEEESSEDSNEEEEEDEEESSEAKSVKVIK
 LNKDDKGRDKGKGRPNRGKAKPVVSDFDSDDEEQDEREQSESGTDDE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8017_c04.zip

Restriction Sites: Sgfl-MluI

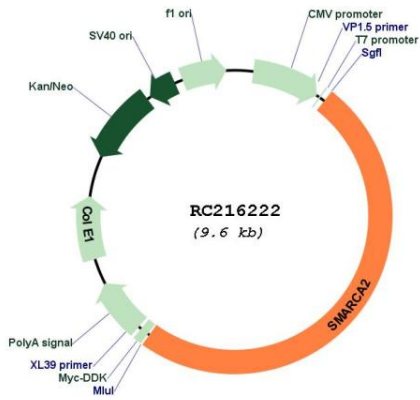
Cloning Scheme:



ACCN: NM_003070

ORF Size:	4770 bp
OTI Disclaimer:	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
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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_003070.5
RefSeq Size:	5758 bp
RefSeq ORF:	4773 bp
Locus ID:	6595
UniProt ID:	P51531
Cytogenetics:	9p24.3
Domains:	SNF2_N, DEAD, BROMO, helicase_C, HSA, BRK
Protein Families:	Druggable Genome
MW:	181.1 kDa
Gene Summary:	The protein encoded by this gene is a member of the SWI/SNF family of proteins and is highly similar to the brahma protein of Drosophila. Members of this family have helicase and ATPase activities and are thought to regulate transcription of certain genes by altering the chromatin structure around those genes. The encoded protein is part of the large ATP-dependent chromatin remodeling complex SNF/SWI, which is required for transcriptional activation of genes normally repressed by chromatin. Alternatively spliced transcript variants encoding different isoforms have been found for this gene, which contains a trinucleotide repeat (CAG) length polymorphism. [provided by RefSeq, Jan 2014]

Product images:



Circular map for RC216222