

Product datasheet for **RR210055**

Smarca4 (NM_134368) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smarca4 (NM_134368) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Smarca4
Synonyms:	brg-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR210055 representing NM_134368 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGTCTACTCCAGACCCACCCCTGGGTGGAACCCCTCGGCCTGGTCTTCCCCAGGCCCTGGTCTTCAC
CTGGTGAATGCTGGGTCTAGCCCTGGCCCTCACCAGGTTCTGCCACAGCATGATGGGGCAAGCCC
AGGACCTCCTTCAGCAGGACATCCCATGCCACCCAGGGGCTGGAGGGTACCCACAGACAACATGCAT
CAAATGCACAAGCCTATGGAGTCCATGCACGAGAAGGGCATGCCTGATGACCCACGATACAACCAAATGA
AAGGGATGGGCATGCGATCAGGGGCCACACAGGTATGGGACCTCCGCCTAGTCCATGGACCAGCATT
TCAAGGTTACCCCTCACCTTAGGTGGCTCTGAACATGCCTCCAGTCTGTCCCGCCAGCGGCCCATCT
TCAGGCCCTCAGATGTCTCTGGGCCAGGAGGGGCCCACTAGATGGTCTGACCCACAGCCTTGGGGC
AGCAAAACAGAGGCCCAACCCATTTAACCAGAACCAGCTGCATCAACTCAGAGCTCAGATAATGGCCTA
TAAGATGTTGGCCAGGGGCCAGCCATTGCCCGACCCTGCAGATGGCCGTTCAAGGCAAGCGGCCGATG
CCTGGAATGCAGCAGCAGATGCCAACACTACCTCACCTTCAGTGTCTGCCACAGGACCTGGACCCGGCC
CTGGCCCTGGCCCTGGCCAGGTCCAGGACCAGCCCTCCGAATTACAGTAGACCCCATGGTATGGGAGG
GCCAACATGCCTCCTCCAGGACCTCAGGTGTGCCCCCGGGATGCCTGGTCAGCCTCCTGGAGGGCCT
CCCAAGCCATGGCCTGAAGGACCATGGCCAATGCTGCTGCCCCCAAGCACCCACAGAAGCTGATTC
CCCCGCAACCAACAGGCCGCCCTTACCTGCACCTCCTGCTGTCCCGCCTGCTGCCTCACCTGTAATGCC
ACCACAAACACAGTCCCCAGGGCAGCCAGCCAGCCTGCTCCATTGGTGCCATTGCACAGAAGCAGAGC
CGCATCACCCCATCCAGAAGCCCGGGGCTGGACCCTGTGGAGATCCTACAGGAGCGGGAGTACAGGC
TGCAGGCTCGAATCGCACACAGAATTGAGAACTTGAACCTCCCTGGTCCCTGGCTGGGACCTTCCG
AACCAAAGCAACCATCGAACTCAAGGCCCTTAGGTTGCTGAACTCCAGAGGCAGCTGCGCCAGGAGGTG
GTGGTGTGCATGCGAAGAGACACAGCCCTAGAGACAGCCCTCAATGCCAAGGCTTATAAGCGCAGCAAAC
GGCAGTCACTGCGGGAGGCCCGCATCACTGAGAAGCTGGAGAAGCAGCAGAAGATTGAACAGGAACGCAA
CGTCTGTCAGAAGCACCAGGAGTACCTCAACAGCATTCTGCAGCATGCCAAGGACTTCAGGGAGTATCAC
AGATCAGTCACAGGCAAACCTCCAGAACTCACCAAGGCTGTGGCCACCTACCATGCCAACACTGAGCGGG



AGCAAAAGAAAGAAAATGAGCGCATCGAGAAGGAACGGATGCGAAGGCTTATGGCTGAAGACGAGGAGGG
 CTACCGCAAGCTCATTGACCAGAAGAAGGACAAGCGCCTGGCCTACCTCCTGCAGCAGACAGATGAGTAT
 GTGGCCAACTCACAGAGCTGGTGCGGCAGCACAAAGCTGCCAGGTAGCCAAGGAGAAGAAGAAAA
 AGAAAAAGAAGAAGGCAGAAAATGCTGAAGGGCAGACCTGCCATTGGACCCGACGGTGAGCCTCTGGA
 TGAGACCAGCCAGATGAGTGACCTCCCTGTGAAGGTGATCCATGTGGAGAGTGGCAAGATCCTCACTGGC
 ACAGATGCCCCAAAAGCCGGGCAGCTGGAAGCCTGGCTTGAGATGAACCCAGGGTATGAAGTACCTCCCA
 GATCAGATAGTGAAGAAAGTGGCTCTGAAGAGGAGGAGGAGGAGGAAGAGGAGCAGCTACGCCCGC
 ACAGCCCCCTACACTGCCTGTGGAAGAAAAGAAGATTCCAGACCCAGACAGCGATGATGTCTCTGAG
 GTGGACGCTCGACACATTATTGAGAACGCCAAGCAGGATGTGGACGATGAGTACGGCGTGTCCCAGGCC
 TTGCTCGTGGTCTGCAGTCTACTATGTGTGGCCCATGCAGTGACAGAGAGAGTAGATAAGCAGTCAGC
 CCTCATGGTCAACGGTGTCTCAAACAGTACCAGATCAAGGGTCTGGAGTGGCTGGTGTCCCTGTACAAC
 AACACCTGAACGGCATCCTGGCTGATGAGATGGGGCTGGGGAAGACCATCCAAACCATTGCACTCATCA
 CGTACCTCATGGAGCACAAGCGCATCAATGGGCCCTTCTCATCATCGTTCCTCTCTCGACGCTGTCAA
 CTGGGCATATGAATTTGACAAGTGGGCCCTCTGTGGTGAAGGTTTCTACAAGGGCTCTCCAGCTGCC
 AGACGAGCTTTTGTCCCCAGCTTCGCAGCGGCAAGTTCAATGTCTTATTGACCACCTACGAGTATATCA
 TCAAAGACAAACATATCCTGGCCAAGATCCGCTGGAAGTACATGATTGTGGATGAAGGCCACCGCATGAA
 GAACCACCACTGCAAATGACACAGTCTTAATACACACTACGTGGCCCTCGGCGCCTGCTTCTCACA
 GGCACGCCACTGCAGAACAAGCTACCTGAGCTCTGGGCACTGCTGAACCTCCTGCTCCCCACTATCTTCA
 AGAGCTGCAGCACCTTCGAACAGTGGTTCAATGCACCTTTGCCATGACTGGAGAGAAGGTGGACCTGAA
 TGAGGAGGAGACCATCCTCATTATTCGTGCTACACAAGGTGCTACGGCCCTTCTGCTGCGGCGTCTC
 AAGAAGGAAGTTGAAGCCAGCTCCCTGAGAAGGTAGAATATGTCATCAAATGTGACATGTCAGCCCTGC
 AGCGTGTGCTCTACCGTCACATGCAGGCCAAAGGTGTGCTGTTGACTGACGGCTCTGAGAAGGACAAGAA
 GGCCAAAGGTGGCACAAGACGCTGATGAACACTATCATGCAGCTGCGCAAGATCTGCAACCACCCTAC
 ATGTTCCAGCACATTGAGGAGTCTTCTCTGAGCACCTGGGTTTACCGGTGGCATCGTGCAAGGATTGG
 ACCTATATCGTGCCTCAGGGAAATTTGAACTTCTTGATAGAATCTACCCAAACTCCGTGCAACAAACCA
 TAAAGTGTACTCTTCTGCCAAATGACCTCCCTCATGACCATCATGGAAGACTACTTTGCATACCGTGGC
 TTCAAATACCTCAGGCTTGACGGAACCACAAAAGCAGAAGACCGGGGCATGCTGTTGAAAACCTTTAATG
 AGCCTGGCTCTGAGTATTTCAATTTCTACTCAGTACCCGTGCTGGGGGGCTGGGCTGAATCTGCAGTC
 AGCTGACACTGTGATCATCTTTGACAGTACTGGAATCCTCACCAGGACCTGCAAGCACAGGATCGTGCC
 CATCGGATTGGGAGCAGAATGAGGTGCGTGTGCTTCGCCTGTGCACCGTCAACAGTGTGGAAGAGAAGA
 TACTGGCTGCTGCTAAATACAACTCAATGTGGATCAGAAGGTATCCAGGCAGGCATGTTTGACCAGAA
 GTCTTCCAGCCATGAGAGGCGTGCTTCTGACAGCCATCCTGGAGCACGAGGAGCAGGACGAGGAGGAA
 GATGAGGTGCCTGATGATGAGACCGTCAACCAGATGATTGCCCGGCACGAGAAGAATTTGACCTTTCA
 TGCGCATGGACTTGGACCGCCGGCGTGAAGAAGCCCGCAACCCCAAGCGGAAGCCACGCCTGATGGAAGA
 GGATGAGCTTCCATCCTGGATCATCAAGGATGATGCAGAGGTAGAGCGGCTGACATGTGAAGAGGAAGAG
 GAAAAGATGTTTCGGCCGTGGTTCTCGCCACCGCAAGGAGGTAGACTACAGCGACTCACTGACAGAGAAGC
 AGTGGCTCAAGGCTATCGAGGAGGGCACGCTGGAGGAGATCGAAGAGGAGGTCCGGCAGAAGAAATCTTC
 ACGTAAGCGTAAGCGAGACAGCGAGGCCGGCTCCTCCACCCCGACCACCAGCACCCGACGGCTGACAAG
 GACGAGGAGAGCAAAAAGCAGAAGAAACGTGGGCGGCCACCTGCCGAGAAGCTGTCCCAAAACCCACCTA
 ACCTACCAAGAAGATGAAGAAGATCGTGGACGCTGTGATCAAGTACAAAGACAGTGTGGACGTCAGCT
 CAGTGAGGTGTTCAATCAGCTCCCTCTCGCAAGGAACCTCCTGAGTACTATGAGCTCATCCGAAACCT
 GTGGACTTCAAGAAGATCAAGGAACGCATCCGAAACCACAAGTACCGCAGCCTCAATGACCTGGAGAAGG
 ACGTGATGTTGCTGTGCCAGAATGCTCAGACCTTCAACCTCGAGGGCTCCTGATCTACGAGGACTCCAT
 CGTCTGCAGTCTGTCTTACCAGCGTGCAGCAGAAAATCGAGAAGGAGGATGACAGTGAAGGCGAGGAA
 AGCGAGGAGGAAGAAGAGGGCGAGGAGGAAGGCTCTGAGTCTGAGTCCCCTCTGTCAAGGTAAGATCA
 AGCTGGGTGAAAAGGAGAAGGCCAGGACCGACTCAAGGGGGGACGGCGGCGCAAGCCGGGGTCCCG
 GGCCAAGCCTGTCTGAGTGACGATGACAGTGTGAGGAGCAGGAGGAGGACCGCTCAGGAAGTGGCAGC
 GAGGAAGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR210055 representing NM_134368
 Red=Cloning site Green=Tags(s)

MSTDPPLGGTPRPGSPGPGSPGAMLGPSGPGSPGSAHSMGPPSPGPPSAGHPMPTQGGPGYPQDNMH
 QMHKPMESMHEKGMPPDDPRYNQMKGMGRSGAHTGMGPPSPMDQHSQGYPSPLGGSEHASSPVPASGSPS
 SGPQMSSSGPGAPLDGSDPQALGQONRGPTPFNQNLHQLRAQIMAYKMLARGQPLPDHLQMAVQKGRPM
 PGMQQQMPPLPPPSVSATGPGPGPGPGPGPGPAPPNYSRPHGMGPPNMPPPGSPGVPPGMPGQPPGGP
 PKPWPEGPMANAAAPTSTPQKLIPPQPTGRPSAPPAPVPPAASPVMPPQTQSPGQPAQPAPLVPLHQKQS
 RITPIQKPRGLDPEILQEREYRLQARIAHRIQELENLPGSLAGDLRTKATIELKALRLLNFQRQLRQEV
 VVCMRRDTALETALNAKAYKRSKRQSLREARITEKLEKQKQIEQERKRRQKHQEYLNLSILQHAQDFREYH
 RSVTGKQLKLTAVATYHANTEREQKKENERIEKERMRLMADEEGYRKLIDQKKDKRLAYLLQQTDEY
 VANLTELVRQHKAAQVAKEKKKKKKKAENAEGQTPAIGPDGEPLDETSQMSDLPVKVIHVESGKILTG
 TDAPKAGQLEAWLEMNPGYEVAPRSDSEESGSEEEEEEEEEEQPQAPPTLPVEEKKKIPDPDSDVSE
 V DARHI I ENAKQVDDEYGVSQLARGLQSYAVAHAVTERVDKQSALMVNGVLKQYQIKGLEWL VSLYN
 NNLNGILADEMGLKTIQTIALITYLMEHKRINGPFLIIVPLSTLSNWAYEFDKWAPSVVKVSYKGSAA
 RRAFVPLRSGKFNVLTTYEYI IKDKHILAKIRWKYMI VDEGHRMKNHHCKLTQVLNTHYVAPRLLLT
 GTPLQNKLP ELWALLN FLLPTIFKSCSTFEQWFNAPFAMTGEKVDLNEEETILIRRLHKVLRPFLLRRL
 KKEVEAQLPEKVEYVIKCDMSALQRVLYRHMQAKGVLLTDGSEKDKKGGTKTLMNTIMQLRKICNHPY
 MFQHIEESFSEHLGFTGGIVQGLDLYRASGKFELLDRIPLKLRATNHNKVLFFCQMTSLMTIMEDYFAYRG
 FKYLRLDGTTKAEDRGMLLKTTFNEPGSEYFIFLLSTRAGGLGNLQSADTVIIFDSDWNPHQDLQAQDRA
 HRIGQQNEVRVLR LCTVNSVEEKILAAAKYKLNVDQKVIQAGMFDQKSSSHERRAFLQAILEHEEQDEEE
 DEVPDDET V NQMIARHEEEFDL FMRMDLDRRREEARNP KRKPRLMEDELPSWIKDDAEVERLTCEEEE
 EKMFGRGSRHRKEVDYSDSLTEKQWLKAIIEEGTLEEIEEEVQRKKSSRKRKRKRDSEAGSSTPTTSTRSRDK
 DEESKKQKGRPPAEKLSNPNNLTKMKKIVDAVIKYKDSGRQLSEVFIQLPSRKELPEYYELIRKP
 YDFKKIKERIRNHKYSRLNDLEKDVMLLCQNAQTFNLEGLIYEDSIVLQSVFTSVRQKIEKEDDSEEGEE
 SEEEEEGEEGSESESRSVKVIKLGKKEKAQDR LKGGRRRPSRGSRAKPVVSDDDSDDEEQEEDRS GSGS
 EED

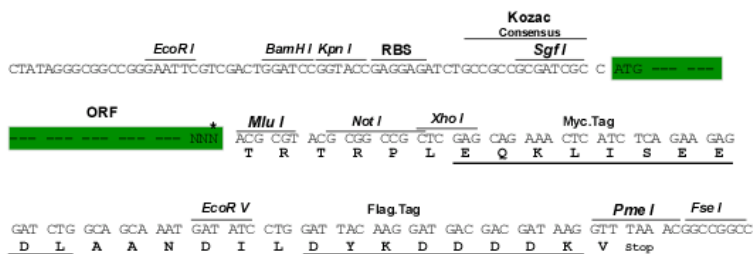
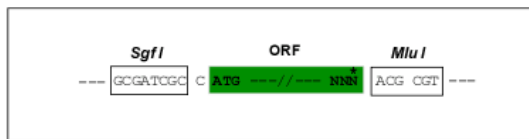
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

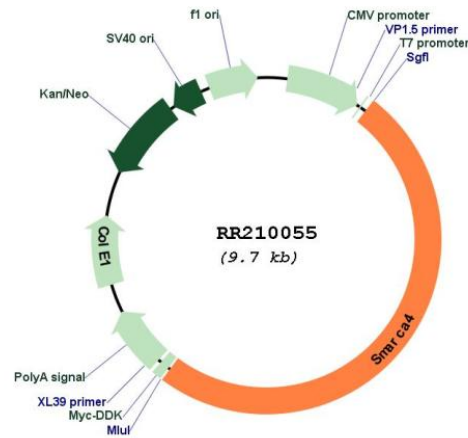
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_134368

ORF Size: 4839 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:

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_134368.1](#), [NP_599195.1](#)

RefSeq Size: 5568 bp

RefSeq ORF: 4842 bp

Locus ID: 171379
Cytogenetics: 8q13
MW: 181.4 kDa
Gene Summary: mouse homolog is a catalytic subunit of mammalian chromatin-remodeling complexes [RGD, Feb 2006]