

Product datasheet for **RG203774**

SMRC2 (SMARCC2) (NM_139067) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMRC2 (SMARCC2) (NM_139067) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SMRC2
Synonyms:	BAF170; CRACC2; CSS8; Rsc8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG203774 representing NM_139067 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGTGCGGAAGAAGGACGGCGGCCCAACGTGAAGTACTACGAGGCCGGACACCGTGACCCAGT
TCGACAACGTGCGGCTGTGGCTCGGCAAGAACAACAAGAAGTATATACAAGCTGAACCACCCACCAACAA
GTCCCTGTCTAGCCTGGTGTACAGTTGCTACAATTTTCAGGAAGAAGTTTTGGCAAACATGTCAGCAAT
GCACCGCTCACTAACTGCCGATCAAATGTTTCCTAGATTTCAAAGCGGGAGGCTCCTTGTGCCACATTC
TTGCAGCTGCCTACAAATTCAGAGTGACCAGGGATGGCGGCGTTACGATTTCCAGAATCCATCAGCAT
GGACCGCAATGTGAAATGTTTATGACCATTGAGAAGTCCTTGGTGCAGAATAATTGCCTGTCTCGACCT
AACATTTTTCTGTGCCAGAAATGAGCCAACTACTAGGGAAATTAAGGACATTATCAAGAGACACC
AGGGAACAGTCACTGAGGATAAAGAACAATGCCTCCCATGTTGTGTATCCTGTCCCGGGAATCTAGAAGA
AGAGGAATGGGTACGACCAGTCAAGAAGGGATAAGCAGGTTCTTCTGCACTGGGGCTACTATCCTGAC
AGTTACGACACGTGGATCCCAGCGAGTGAATGAGGCATCTGTGGAAGATGCTCCAACCTCTGAGAAAC
CTAGGAAGGTTTATGCAAAAGTGGATCCTGGACACCGACACCTTCAATGAATGGATGAATGAGGAAGACTA
TGAAGTAAATGATGACAAAAACCTGTCTCCCGCCGAAAGAAGATTTTCAGCCAAGACACTGACAGATGAG
GTGAACAGCCAGATTCAGATCGACGGGCAAGAAGGGGGAACTATAAGAAGAGGAAGCGCTCCCCCT
CTCCTTACCAACCCAGAAAGCAAGAAGAAAAATGCTAAGAAAGTCCCTCAACACCTTACACTAAGTC
AAAGCGTGGCCACAGAGAAGAGGAGCAAGAAGACCTGACAAAGGACATGGACGAGCCCTACCAGTCCCC
AATGTAGAAGAGGTGACACTTCCCAAAACAGTCAACACAAAGAAAGACTCAGAGTCGGCCCCAGTCAAAG
GCGGCACCATGACCGACCTGGATGAACAGGAAGATGAAAGCATGGAGACGACGGGCAAGGATGAGGATGA
GAACAGTACGGGAACAAGGGAGAGCAGACCAAGAATCCAGACCTGCATGAGGACAATGTGACTGAACAG
ACCCACCACATCATCTCCAGCTACGCTGCCTGGTTTGACTACAATAGTTCATGCCATTGAGCGGA
GGGCTCTCCCGAGTCTTCAACGGCAAGAACAAGTCCAAGACTCCAGAGATCTACCTGGCCTATCGAAA
CTTTATGATTGACTTACCGACTGAACCCCAAGAGTATCTTACCTTACCGCCTGCCCGCAACCTA



[View online »](#)

GCGGGTGATGTCTGTGCCATCATGAGGGTCCATGCCTTCCTAGAACAGTGGGGTCTTATTAACACCAGG
 TGGATGCTGAGAGTCGACCAACCCCAATGGGGCCTCCGCCTACCTCTCACTTCCATGTCTTGGTGACAC
 ACCATCAGGGCTGGTGCCTCTGCAGCCCAAGACACCTCAGGGCCGCCAGGTTGATGTGTATACCAAGGCT
 GGGCGAAAGGGCAAAGAGCTGGATGACCTGGTCCAGAGACGGCTAAGGGCAAGCCAGAGCTGCAGACCT
 CTGCTTCCCAACAAATGCTCACTTTCTGACAAAGGCAAAGAGAAACCAACAGACATGCAAACTTTGG
 GCTGCGCACAGACATGTACAAAAAAGAATGTTCCCTCCAAGAGCAAGGCTGCAGCCAGTGGCACTCGT
 GAGTGGACAGAACAGAAACCCCTGCTTCTCTGGAGGCACTGGAATGTACAAGATGACTGGAACAAAG
 TGTCGAGCATGTGGGAAGCCGCACACAGGACGAGTGCATCTTGATTTTCTTCTCCATTGAAGA
 CCCATACCTGGAGGACTCAGAGGCTCCCTAGGCCCTGGCCTACCAACCCATCCCTTCACTGAGTGC
 GGCAACCTGTTATGAGCACTGTGCTTCTGGCCTCTGTCGTCGATCCCCGAGTCGCCTCTGCTGCTG
 CAAAGTCAGCCCTAGAGGAGTTCTCAAAATGAAGGAAGAGGTACCCACGGCCTTGGTGGAGGCCATGT
 TCGAAAAGTGAAGAAGCAGCCAAAGTAAACAGGCAAGGCGGACCTGCCTTCGGTCTGGAAGCAGTGGC
 ATTGACAGAACCCCTCTGATGAGCCTGAGCGGATTGAGGAGAGCGGGAATGACGAGGCTCGGTGGAAG
 GCCAGGCCACAGATGAGAAGAAGGAGCCAAAGGAACCCGAGAAGGAGGGGTGCTATAGAGGAGGAAGC
 AAAAGAGAAAACAGCGAGGCTCCCAAGAAGGATGAGGAGAAAGGAAAGAGGGCAGAGTGAAGGAG
 TCCGAGAAGAGTGTGGAGACCAATAGTCGATCCTGAGAAGGAGAAGGACCAAGGAAGGGCAGGAGG
 AAGTGCTGAAGGAAGTGGTGGAGTCTGAGGGGAAAGGAAGACAAAGGTGGAGCGGGACATTGGCGAGG
 CAACCTCTCCACCGCTGCTGCCGCCCTGGCCGCCCGCAGTGAAGCTAAGCACTTGGCTGCTGTT
 GAGGAAAGGAAGATCAAACTTTTGGTGGCCTGCTGGTGGAGACCAGATGAAAAAGTTGGAGATCAAA
 TTCGGCACTTTGAGGAGCTGGAGACTATCATGGACCGGGAGCGAGAAGCACTGGAGTATCAGAGGACGA
 GCTCCTGGCCGACAGACAAGCCTTCCACATGGAGCAGCTGAAGTATGCGGAGATGAGGGCTCGGCAGCAG
 CACTTCCAACAGATGCACCAACAGCAGCAGCAGCCACCAGCCCTGCCCCAGGCTCCCAGCCTATCC
 CCCCACAGGGGCTGCTGGGCCACCCGAGTCCATGGCTTGGCTGTGGCTCCAGCCTCTGATGCTCCTGC
 TCCTGCTGGCAGTGGGGCCCTCCAGGAAGTTTGGGCCCTTCTGAACAGATTGGGACAGGCAAGGTTAACT
 GCAGGGCCACAGCAGCAGCAACAGCTGGAGCCCCCAGCCTGGGGCAGTCCCACCAGGGGTTCCCCC
 CTGGACCCATGGCCCTCACCGTTCCCAACCAAACTCCTCCCTCAATGATGCCAGGGGAGTGGC
 AGGCAGCGGGCACCCAGGCGTGGCGGACCCAGGCACCCCTGCCTCCAGACCCACAGCCCGAGCCCA
 GGCACGGTACCCTGTGCCACCTCCACAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG203774 representing NM_139067
 Red=Cloning site Green=Tags(s)

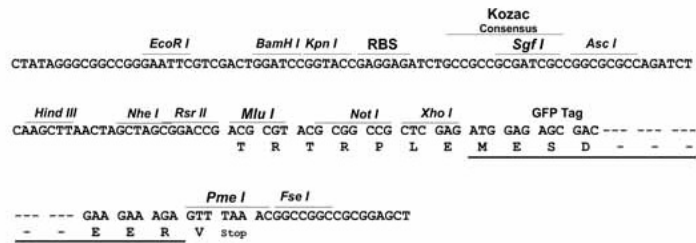
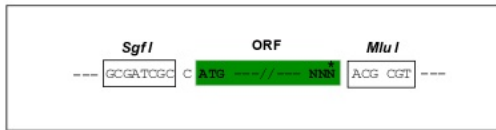
MAVRKKDGGPNVYEEAADTVTQFDNVRLWLGNKYKYYIQAEPPPTNKSLSSLVVQLLQFQEEVFGKHVSN
 APLTKLPIKCFDFKAGGSLCHILAAAYKFKSDQWRRYDFQNP SRMDRNVEMFMTIEKSLVQNNCLSRP
 NIFLCPEIEPKLLGKLDI IKRHQGTVTEKNNASHVVYPVPGNLEEEWVRPVMKRDQVLLHWGYYP
 SYDTWIPASEIEASVEDAPTPEKPRKVHAKWILD TDTFNEMNEEDYEVDNDKNPVSRRKKISAKLTDE
 VNSPDSRRRDKKGGNYKRRKSPSPSTPEAKKNAKKGSTPYTKSKRGHREEEQEDLTKDMDEPSPVP
 NVEEVTLPKTVNTKDKDSEAPVKGGM TDLDEQEDESMTTGGKDEDENSTGNKGEQTKNPD LHEDNVTEQ
 THHIIIPSYAAWFDYNSVHAIERRALPEFFNGKNKSKTPEIYLAYRNF MIDTYRLNPQEYLTSTACRRNL
 AGDVCAIMRVHAFLEQWGLINYQVDAESRPTPMGPPPTSHFHVLA DTPSGLVPLQPKTPQGRQVDADTKA
 GRKGKELDDLVPETAKGKPELQTSASQQMLNFPDKGKEKPTDMQNFGLR TDMYTKKNVPSKSKAAASATR
 EWTEQETLLLLLEALEMYKDDWNKVSEHVGSR TQDECILHFLRLPIEDPYLEDSEASLGPLAYQPIPFSSQ
 GNPVMSTVAFLASVVDPRVASAAKSALEEF SKMKKEEVP TALEAHVRKVEEA AKVTGKADPAFGLSSG
 IAGTTSDEPERIEESGNDEARVEGQATDEKKEPK EPREGGAAIEEEAKEKTSEAPKKDEEKGKEGDSEKE
 SEKSDGDP IVDPEKEKEPKEGQEEVLKEVVESEGERKTKVERDIGE GNLSTAAAAALAAA AVKAKHLAAV
 EERKIKSLVALLVETQMKKLEIKLRHFEEL ETIMDREREALEYQRQQLADRQAFHMEQLKYAEMRARQQ
 HFQMQHQQQQPPALPPGSQPIPP TGAAGPPAVHGLAVAPASVVPAPAGSGAPPGLPSEQIQGAGST
 AGPQQQQPAGAPQPGAVPPGVPPP GPHGSPFPNQTPPSMMPGAVPGSGHPGVADPGTLPDPTAPSP
 GTVTPVPPPQ

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_139067

ORF Size: 3390 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_139067.4](#)

RefSeq Size: 3786 bp

RefSeq ORF: 3393 bp

Locus ID: 6601

UniProt ID: [Q8TAQ2](#)

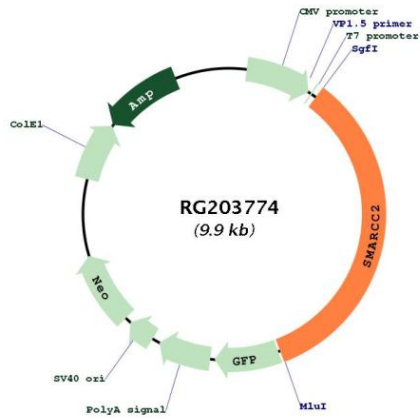
Cytogenetics: 12q13.2

Domains: CHROMO, myb_DNA-binding, SWIRM

Protein Families: Transcription Factors

Gene Summary: The protein encoded by this gene is a member of the SWI/SNF family of proteins, whose members display helicase and ATPase activities and which 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 and contains a predicted leucine zipper motif typical of many transcription factors. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG203774