

Product datasheet for **RG204597**

SMRC2 (SMARCC2) (NM_003075) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMRC2 (SMARCC2) (NM_003075) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SMARCC2
Synonyms:	BAF170; CRACC2; CSS8; Rsc8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204597 representing NM_003075 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGTGCGGAAGAAGGACGGCGGCCCAACGTGAAGTACTACGAGGCCGGACACCGTGACCCAGT
TCGACAACGTGCGGCTGTGGCTCGGCAAGAACAACAAGAAGTATACAAGCTGAACCACCCACCAACAA
GTCCCTGTCTAGCCTGGTGTACAGTTGCTACAATTTTCAGGAAGAAGTTTTGGCAAACATGTCAGCAAT
GCACCGCTCACTAACTGCCGATCAAATGTTTCCTAGATTTCAAAGCGGGAGGCTCCTTGTGCCACATTC
TTGCAGCTGCCTACAAATTCAGAGTGACCAGGGATGGCGCGTACGATTTCCAGAATCCATCAGCAT
GGACCGCAATGTGAAATGTTTATGACCATTGAGAAGTCCTTGGTGCAGAATAATTGCCTGTCTCGACCT
AACATTTTTCTGTGCCAGAAATGAGCCAACTACTAGGGAAATTAAGGACATTATCAAGAGACACC
AGGGAACAGTCACTGAGGATAAAGAACAATGCCTCCCATGTTGTGTATCCTGTCCCGGGAATCTAGAAGA
AGAGGAATGGGTACGACCAGTCAATGAAGAGGGATAAGCAGGTTCTTCTGCACTGGGGCTACTATCCTGAC
AGTTACGACACGTGGATCCCAGCGAGTGAATGAGGCATCTGTGGAAGATGCTCCAACCTCTGAGAAAC
CTAGGAAGGTTTATGCAAAAGTGGATCCTGGACACCGACACCTTCAATGAATGGATGAATGAGGAAGACTA
TGAAGTAAATGATGACAAAAACCTGTCTCCCGCCGAAAGAAGATTTTCAGCCAAGACACTGACAGATGAG
GTGAACAGCCAGATTCAGATCGACGGGCAAGAAGGGGGAACTATAAGAAGAGGAAGCGCTCCCTCCT
CTCCTTACCAACCCAGAAAGCAAGAAGAAAAATGCTAAGAAAGTCCCTCAACACCTTACACTAAGTC
AAAGCGTGGCCACAGAGAAGAGGAGCAAGAAGACCTGACAAAGGACATGGACGAGCCCTACCAAGTCCCC
AATGTAGAAGAGGTGACACTTCCCAAAACAGTCAACACAAAGAAAGACTCAGAGTCGGCCCCAGTCAAAG
GCGGCACCATGACCGACCTGGATGAACAGGAAGATGAAAGCATGGAGACGACGGGCAAGGATGAGGATGA
GAACAGTACGGGAAACAAGGGAGAGCAGACCAAGAATCCAGACCTGCATGAGGACAATGTGACTGAACAG
ACCCACCACATCATCATTCCCAGCTACGCTGCCTGGTTTGACTACAATAGTTCATGCCATTGAGCGGA
GGGCTCTCCCGAGTCTTCAACGGCAAGAACAAGTCCAAGACTCCAGAGATCTACCTGGCCTATCGAAA
CTTTATGATTGACTTACCGACTGAACCCCAAGAGTATCTTACCTTACCGCCTGCCCGCAAACCTA



[View online >](#)

GCGGGTGATGTCTGTGCCATCATGAGGGTCCATGCCTTCCTAGAACAGTGGGGTCTTATTAACACCAGG
TGGATGCTGAGAGTCGACCAACCCCAATGGGGCCTCCGCCTACCTCTCACTTCCATGTCTTGGTGACAC
ACCATCAGGGCTGGTGCCTCTGCAGCCCAAGACACCTCAGCAGACCTCTGCTTCCCAACAAATGCTCAAC
TTTCTGACAAAGGCAAGAGAAACCAACAGACATGCAAACTTTGGGCTGCGCACAGACATGTACACAA
AAAAGAATGTTCCCTCCAAGAGCAAGGCTGCAGCCAGTCCACTCGTGAGTGGACAGAACAGGAAACCT
GCTTCTCCTGGAGGACTGGAAATGTACAAAGATGACTGGAACAAAGTGTCCGAGCATGTGGGAAGCCGC
ACACAGGACGAGTGCATTTGCATTTTCTCGTCTTCCATTGAAGACCCATACCTGGAGGACTCAGAGG
CCTCCCTAGGCCCTGGCCTACCAACCCATCCCCTTCAGTCAGTCGGGCAACCTGTTATGAGCACTGT
TGCTTCTCCTGGCCTCTGTCTGATCCCGAGTCGCTCTGCTGCTGCAAAGTCAGCCCTAGAGGAGTTC
TCCAAATGAAGGAAGAGGTACCCACGGCCTTGGTGGAGGCCATGTTGAAAAGTGAAGAAGCAGCCA
AAGTAACAGGCAAGGCGGACCCTGCCTTGGTCTGAAAGCAGTGGCATTGCAGGAACCCCTCTGATGA
GCCTGAGCGGATTGAGGAGAGCGGAATGACGAGGCTCGGGTGAAGGCCAGGCCACAGATGAGAAGAAG
GAGCCCAAGGAACCCGAGAAGGAGGGGTGCTATAGAGGAGGAAGCAAAAGAGAAAACCCAGCGAGGCTC
CCAAGAAGGATGAGGAGAAAGGAAAGAGGCGACAGTGAAGAAGTCCGAGAAGAGTGTGGAGACCC
AATAGTCGATCCTGAGAAGGAGAAGGAGCCAAAGGAAGGCCAGGAGGAAGTGTGAAGGAAGTGGTGGAG
TCTGAGGGGAAAGGAAGACAAAGGTGGAGCGGACATTGGCGAGGGCAACCTCTCCACCCTGCTGCCG
CCGCCCTGGCCGCGCCGAGTAAAGCTAAGCACTTGGCTGCTGTTGAGAAAGGAAGTCAAATCTTT
GGTGGCCCTGCTGGTGGAGACCCAGATGAAAAGTTGGAGATCAAACCTTCCGCACTTTGAGGAGCTGGAG
ACTATCATGGACCGGGAGCGAGAAGCACTGGAGTATCAGAGGCAGCAGCTCCTGGCCGACAGACAAGCCT
TCCACATGGAGCAGCTGAAGTATGCGGAGATGAGGGCTCGGCAGCAGCACTTCCAACAGATGCACCAACA
GCAGCAGCAGCCACCACCAGCCCTGCCCCAGGCTCCCAGCCTATCCCCCAACAGGGGCTGCTGGGCCA
CCCGCAGTCCATGGCTTGGCTGTGGCTCCAGCCTCTGTAGTCCCTGCTCCTGCTGGCAGTGGGGCCCTC
CAGGAAGTTTGGCCCTTCTGAACAGATTGGGCAGGCAGGGTCAACTGCAGGGCCACAGCAGCAGCAACC
AGCTGGAGCCCCCAGCCTGGGGCAGTCCACCCAGGGGTTCCCCCCTGGACCCATGGCCCTCACCG
TTCCCCAACCAACAACTCCTCCCTCAATGATGCCAGGGCAGTCCAGGCAGCGGGCACCCAGGCGTGG
CGGGTAATGCTCCTTTGGGTTTGCCTTTTGGCATGCCGCCTCCTCCTCCTCCTGCTCCATCCATCAT
CCCATTTGGTAGTCTAGCTGACTCCATCAGTATTAACCTCCCCGCTCCTCCTAACCTGCATGGGCATCAC
CACCATCTCCCGTTGCCCCGGGCACTCTCCCCCACCTAACCTGCCTGTGTCCATGGCGAACCCCTAC
ATCCTAACCTGCCGGGACCACCACCATGCCATCTTCTTGCCTCTCGGGCCGGGCTCGGATCCGCCGC
AGCCCAAAGCCCTGCCATTGTGGCAGCTGTTAGGGCAACCTCCTGCCAGTGCCAGCCACTGCCAGAC
CCAGGCACCCCTGCTCCAGACCCACAGCCCGAGCCAGGCACGGTCAACCCTGTGCCACCTCCAC
AG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG204597 representing NM_003075
 Red=Cloning site Green=Tags(s)

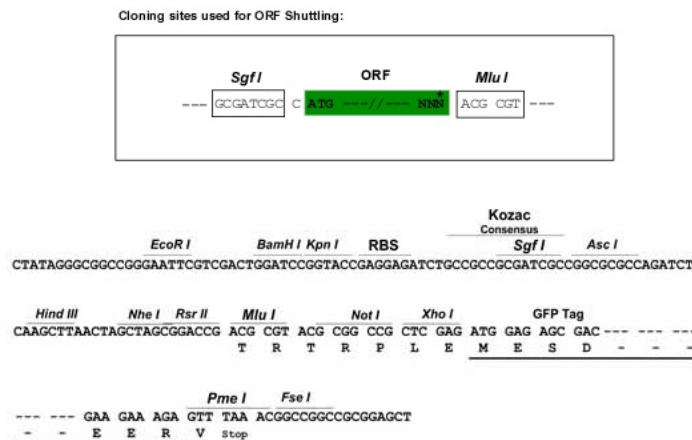
```
MAVRKKDGGPNVKYEEAADTVTQFDNVRLWLGNKYKYYIAEPPNTKSLSSLVVQLLQFQEEVFGKHVSN
APLTKLPIKCFDFKAGGSLCHILAAAYFKSDQGWRRYDFQNP SRMDRNVEMFMTIEKSLVQNNCLSRP
NIFLCP EIEPKLLGKLDI IKRHQGT VTEKNNASHVVYPVPGNLEEEWVRPVMKRDKQVLLHWGYYPD
SYDTWIPASEIEASVEDAPTPEKPRKVHAKWILD TDTFNEMNEEDYEVNDDKNPVSRRKKISAKLTDE
VNSPDSDRRDKKGNKYKRRKSPSPSTPEAKKNAKKG PSTPYTKSKRGHREEEQEDLTKDMDEPSPVP
NV EEVTLPKTVNTKKDSE SAPVKGGM TDLDEQEDES METTGKDE DENSTGNKGEQTKNPD LHEDNTEQ
THHIIIPSYAAWF DYN SVHAIERRALPEFFNGKNKSKTPEIYLAYRNF MIDTYRLNPQEYLTSTACRRNL
AGDVCAIMRVHAFLEQWGLIN YQVDAESRPTPMGPPPTSHFHVLA DTPSGLVPLQPKTPQQT SASQMLN
FPDKGKEKPTDMQNFGLR TDMYTKKNVPSKSKAAA SATREWTEQET LLLLEALEMYKDDWNKVSEHVGSR
TQDECILHFLRLPIEDPYLEDSEASLGPLAYQPIPF SQSGNPVMSTVAF LASVVDPRVASAAAKSALEEF
SKMKKEEPTALVEAHVRKVEEAAKVTKADPAFGL ESSGIAGTTSDEPERIEESGNDEARVEGQATDEKK
EPKEPREGGGAI EEEAKEKTSEAPKKDEEKGEKGDSEKSEKSDGDP IVDPEKEKEPKEGQEEVLKEVVE
SEGERKTKVERDIGE GNLS TAAAAA LAAA AVKAKHLAAVEERKIKSLVALLVETQM KKLEIKLRHFEELE
TIMDREREAL EYQRQQLADRQAFHMEQLKYAEMRARQQHFQ QMHQQQQPPALPPGSQP IPTGAAGP
PAVHGLAVAPASVVPAPAGSGAPP GSLGPSEQIGQAGSTAGPQQQPAGAPQPGAVPPGVP PPGHPGSP
FPNQQT PPSMMPGAVPGSGHPGVAGNAPLGLPFGMP P P P P P P P P S I I P F G S L A D S I S I N L P A P P N L H G H H
HHL P F A P G T L P P P N L P V S M A N P L H P N L P A T T T M P S S L P L P G L G S A A A Q S P A I V A A V Q G N L L P S A S P L P D
P G T L P P D P T A P S P G T V T P V P P P Q
```

TRTRPLE - GFP Tag - V

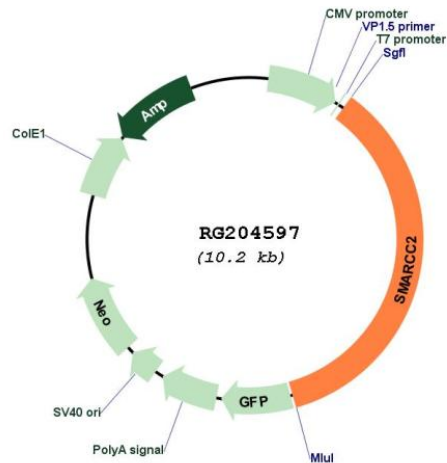
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_003075

ORF Size: 3642 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_003075.5](#)

RefSeq Size: 4039 bp

RefSeq ORF: 3645 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]