

Product datasheet for RC218308

SMARCA1 (NM_003069) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMARCA1 (NM_003069) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SMARCA1
Synonyms:	hSNF2L; ISWI; NURF140; SNF2L; SNF2L1; SNF2LB; SNF2LT; SWI; SWI2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218308 representing NM_003069 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCAGGACACTGCCGAGTGGCAGCCACCGTGGCAGCCGGATGCGACCGCCACTATCGTGGTCA
TAGAGGACGAGCAGCCCGGGCCGTCCACCTCTCAGGAGGAGGGAGCGCCCGCGGCCACCGAAGCCAC
CGCGGCCCGGAGAAGGGCGAGAAGAAGGAGAAAAACGTTTCTTCACTCAACTCAACTTGTCTGCT
AAAGCGCCTAAATCTGAAAAGGAAATGGACCCAGAATATGAAGAGAAAAATGAAAGCCGACCGAGCAAGA
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AACATCTCCACTGAACATGAAATTTGGGACGTCCCGAATAAAGAAAGATGAAAAGCAGAGCTTAATTTCT
GCTGGAGACTACCGCCATAGGCGCACAGAGCAAGAAGAAGATGAAGAGCTACTGTCTGAGAGTCGGAAAA
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CTGGATAAACTATTGGCCAAACTCAAAGAACAGGGTTCAAGGGTTCATTTTCAGCCAGATGACTCGCT
 TGCTGGATATTTTGAAGATTATTGCATGTGGCGTGGTTATGAGTATTGTCGACTGGATGGACAAACCC
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 TCAGCATTTTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC218308 representing NM_003069

Red=Cloning site Green=Tags(s)

MEQDTAAVAATVAADATATIVVIEDEQPGPSTSQEEGAAAAATEATAATEKGEKKKEKNVSSFQKLKLA
 KAPKSEKEMDPEYEEKMKADRKRFEFLKQTELF AHFIQPSAQKSPTSPLNMKLRPRIKKDEKQSLIS
 AGDYRHRRTQEEDLSESRKTSNVCIRFEVSPSYVKGGLRDYQIRGLNWLISLYENGVNGLADEM
 GLGKTLQTIALLGYLKHYRNIPGPHMVL VPKSTLHNMNEFKRWVPSLRVICFVGDKDARA AFIRDEMMP
 GEWDVVCVTSYEMVIKEKSVFKFHWRYLVIDEAHRIKNEKSKLSEIVREFKSTNRLLL TGTP LQNNLHEL
 WALLNFFLLPDVFN SADD FDSWFDTKNCLGDQKL VERLHAVLKPFLRRIKTDVEKSLPPKKEIKIYGLS
 KMQREWYTKILMKDIDVLN SSGKMDKMRLLNILMQLRKCCNHPYLF DGAEPGPPYTTDEHIVSNSGMV
 LDKLLAKLKEQGSRYLIFSQMTRLLDILEDYCMWRGYEYCRLDGQTPHEEREDKFLVEFLGQREAEAF
 NAPNSSKFI FMLSTRAGGLINLASADVILYDSDWNPQVDLQAMDRAHRIGQKKPVRVFRITDNTVEE
 RIVERAEIKRLDSIVIQQGRLIDQQSNKLAKEEMLQMIRHGATHVFASKESEL TDEDITTLERGEKKT
 AEMNERLQKMGESSLRNFRMDIEQSLYKFEGEDYREKQKLG MVEWIEPPKRERKANYAVDAYFREARV
 EPKIPKAPRPPKQPNVQDFQFFPPRLFELLEKEILYRKTIGYKVP RNPDI PNPAQREEQKIDGAEP
 LTPEETEEKEKLLTQGF TNWTKRDFNQFIKANEKYGRDDIDNIAREVEGKSPEE VMEYS AVFWERCNELQ
 DIEKIMAQIERGEARIQRRI SIKKALDAKIARYKAPFHQLRIQYGT SKGKNYTEEEDRFLICMLHKMGFD
 RENVYEELRQCVRNAPQFRFDWF IKSRTAMEFQRRCNTLISLIEKENMEIEERERA EKKKRATKTPMVKF
 SAFS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja2349_a04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003069

ORF Size: 3162 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_003069.5](#)

RefSeq Size: 4124 bp

RefSeq ORF: 3165 bp

Locus ID: 6594

UniProt ID: [P28370](#)

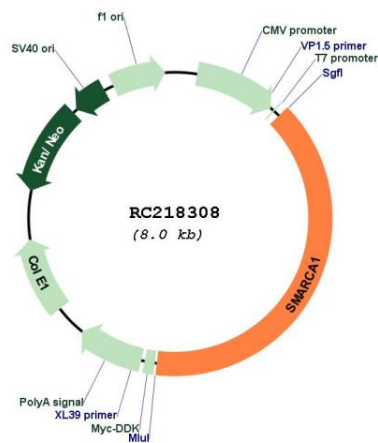
Cytogenetics: Xq25-q26.1
Domains: SNF2_N, myb_DNA-binding, DEAD, helicase_C

Protein Families: Transcription Factors

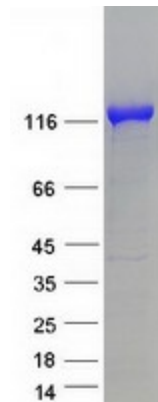
MW: 123.1 kDa

Gene Summary: This gene encodes a member of the SWI/SNF family of proteins. The encoded protein is an ATPase which is expressed in diverse tissues and contributes to the chromatin remodeling complex that is involved in transcription. The protein may also play a role in DNA damage, growth inhibition and apoptosis of cancer cells. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2013]

Product images:



Circular map for RC218308



Coomassie blue staining of purified SMARCA1 protein (Cat# [TP318308]). The protein was produced from HEK293T cells transfected with SMARCA1 cDNA clone (Cat# RC218308) using MegaTran 2.0 (Cat# [TT210002]).