

Product datasheet for RC209444

SMARCE1 (NM_003079) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMARCE1 (NM_003079) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SMARCE1
Synonyms:	BAF57; CSS5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209444 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCAAAAAGACCATCTTATGCCCCACCTCCCACCCAGCTCCTGCAACACAAATGCCAGCACACCAG
GGTTTGTGGGATAACAATCCATACAGTCTCTCGCCTACAACAACACAGGCTGGGAGGGAACCCGGGCAC
CAACAGCCGGGTACGGCATCCTCTGGTATCACGATCCAAAACCCCAAAGCCACCAGATAAGCCGCTG
ATGCCCTACATGAGGTACAGCAGAAAGTCTGGGACCAAGTAAAGGCTTCCAACCCTGACCTAAAGTTGT
GGGAGATTGGCAAGATTATTGGTGGCATGTGGCGAGATCTCACTGATGAAGAAAAACAAGAATATTTAAA
CGAATACGAAGCAGAAAAGATAGAGTACAATGAATCTATGAAGGCTATCATAATCCCCCGCTACCTT
GCTTACATAAATGCAAAAAGTCGTGCAGAAGCTGCTTTAGAGGAAGAAAGTCGACAGAGACAATCTCGCA
TGGAGAAAGGAGAACCCTACATGAGCATTACAGCCTGCTGAAGTCCAGATGATTATGATGATGGCTTTTC
AATGAAGCATACAGCCACCGCCCGTTCCAGAGAAACCACCGCCTCATCAGTGAAATTCTTAGTGAGAGT
GTGGTGCCAGACGTTCCGGTCAGTTGTCAACAGCTAGAATGCAGGTCTCAAACGGCAGGTCCAGTCTCT
TAATGGTTCATCAGCGAAAACCTAGAAGCTGAACCTCTTCAAATAGAGGAACGACACCAGGAGAAGAAGAG
GAAATTCCTGGAAAGCACAGATTCATTTAACAATGAACCTAAAAGGTTGTGCGGTCTGAAAGTAGAAGTG
GATATGGAGAAAATTGCAGCTGAGATTGCACAGGCAGAGGAACAGGCCCGCAAAGGCAGGAGGAAAGGG
AGAAGGAGGCCCGCAGAGCAAGCTGAGCGCAGTCAGAGCAGCATCGTTCTGAGGAAGAACAAGCAGCTAA
CAAAGGCGAGGAGAAGAAAGACGACGAGAACATTCGGATGGAGACAGAGGAGACACACCTTGAAGAAACA
ACAGAGAGCCAACAGAATGGTGAAGAAGGCACGTCTACTCCTGAGGACAAGGAGAGTGGGCAGGAGGGGG
TCGACAGTATGGCAGAGGAAGGAACCAAGTATAGTAACTGGCTCGGAGAGCAACAGTGAACAGTGGGA
GGAGCCACCAACAGATCCCATACCAGAAGATGAGAAAAAAGAA

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC209444 protein sequence
Red=Cloning site Green=Tags(s)

MSKRPSYAPPPTPAPATQMPSTPGFVGYNPYSHLAYNNYRLGGNPGTNSRVTASSGITIPKPPKPPDKPL
 MPYMRYSRKVWDQVKASNPDLKLWEIGKIIGMWRDLTDEEKQEYLNENEAEKIEYNESMKAYHNSPAYL
 AYINAKSRAEAALEESRQRQSRMEKGEPIYMSIQPAEDPPDYDDGF SMKHTATARFQRNHRLISEILSES
 VVPDVRVVTTRMQVLKRQVQSLMVHQKLEAELLQIEERHQEKRRKFLSTDSFNNELKRLCGLKVEV
 DMEKIAAEIAQAEQARKRQEEREKEAAEQAESQSSIVPEEEQAANKGEEKDDENIPMETEETHLEET
 TESQQNGEEGTSTPEDKESGQEGVDSMAEEGTSNTGSESNSATVEEPTDPIPEDEKKE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6127_d11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_003079

ORF Size: 1233 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_003079.5](#)

RefSeq Size: 2425 bp

RefSeq ORF: 1236 bp

Locus ID: 6605

UniProt ID: [Q969G3](#)

Cytogenetics: 17q21.2

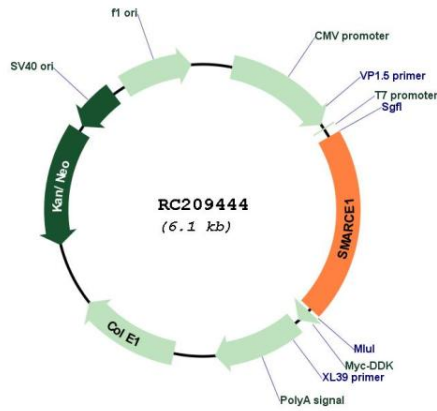
Domains: HMG

Protein Families: Transcription Factors

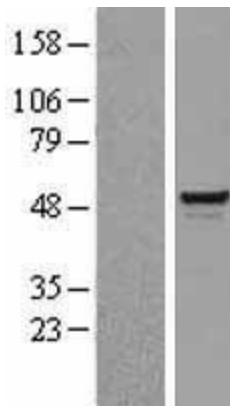
MW: 46.6 kDa

Gene Summary: The protein encoded by this gene is part of the large ATP-dependent chromatin remodeling complex SWI/SNF, which is required for transcriptional activation of genes normally repressed by chromatin. The encoded protein, either alone or when in the SWI/SNF complex, can bind to 4-way junction DNA, which is thought to mimic the topology of DNA as it enters or exits the nucleosome. The protein contains a DNA-binding HMG domain, but disruption of this domain does not abolish the DNA-binding or nucleosome-displacement activities of the SWI/SNF complex. Unlike most of the SWI/SNF complex proteins, this protein has no yeast counterpart. [provided by RefSeq, Jul 2008]

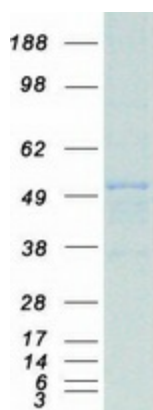
Product images:



Circular map for RC209444



Western blot validation of overexpression lysate (Cat# [LY401073]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209444 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SMARCE1 protein (Cat# [TP309444]). The protein was produced from HEK293T cells transfected with SMARCE1 cDNA clone (Cat# RC209444) using MegaTran 2.0 (Cat# [TT210002]).