

Product datasheet for MR225193

Smarcc1 (NM_009211) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smarcc1 (NM_009211) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Smarcc1
Synonyms:	A115498; BAF155; msp3; Rsc8; SRG3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR225193 representing NM_009211 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGCGCAGCGGGTGGCGGTCCGGGAGCAGCAGCAGGCGCCGTGGGTGCAGGGGTGCGGCGGGG
CCTCCGGGCTGGCCGTGTACCGGAGGAAGGACGGGGGCCCGCCAGCAAGTTTTGGGAGAGCCCGGACAC
GGTGTCCAGCTAGATTCGGTGCAGTCTGGCTGGCAAGCACTACAAGAAGTATGTTTCATGCAGATGCT
CCTACCAATAAAACACTAGCTGGACTGGTGGTGCAGCTTCTACAGTTCCAAGAAGATGCCTTTGGGAAGC
ATGTCACCAACCCAGCTTTCACCAAACTACCTGCAAAATGTTTCATGGATTTCAAAGCTGGAGGCACCTT
GTGTCACATTCTTGGGGCAGCTTACAAGTACAAAAATGAACAGGGCTGGCGGAGATTTGATCTTCAGAAC
CCATCCCGAATGGATCGTAACGTTGAAATGTTTCATGAACATTGAGAAAACATTGGTACAGAACAACTGTC
TGACTAGACCAACATCTACCTCATTCCAGACATTGATTTGAAGTTGGCTAACAGTTGAAAGATATCAT
CAAACGGCATCAGGGGACATTTACTGATGAGAAGTCAAAGCTTCCCACCATATTTATCCATATCCTTCC
TCACAAGAGGATGAGGAGTGGCTGAGACCAGTGATGAGGAGAGACAAGCAGGTGCTGGTGCAGTGGGTT
TCTACCCAGACAGCTATGACACTTGGGTCCACAGTAATGATGTTGATGCTGAAATTGAAGATGCACCAAT
CCCAGAAAAGCCCTGGAAGGTTTCATGTAATAATGGATTTTGGACACTGACGTTTTCAATGAATGGATGAAT
GAAGAGGATTATGAAGTGGATGAGAACAGAAAAGCCAGTGAGCTTTCGTC AACGAATTTCAACAAAGAAATG
AAGAGCCAGTCAGAAGTCCAGAAAAGGAGAGACAGAAAAGCCTCTGCCAACTCTAGGAAGAGGAAACCTTC
CCCTTCTCCTCCTCCTCCACAGCCACAGAGTCCCAGAAAAGAGCGGGAAGAAAGGACAAGCTAGCCTT
TATGGGAAACGTAGAAGTCAAGGAAGAAGATGAGCAAGAAGATCTTACCAAGGACATGGAAGACCCCA
CACCTGTACCTAACATAGAGGAAGTGGTCTCCCTAAGAATGTAAACCCAAAGAAGGACAGTGAAAAAC
ACCCGTTAAAGGAGGCACGGTGGCAGATCTAGATGAGCAGGATGAAGAAGCAGTTACAACAGGAGGAAA
GAAGATGAAGATCCAGCAAAGGTGATCCAAGTCGCTCAGTTGACCCAGGTGAAGACAACGTGACAGAAC
AGACCAATCACATCATTATCCAGCTACGCATCCTGGTTTGATTATAATTGATTTCATGTCATTGAACG
GGTGGCCTTCTGAGTTCTTAAATGAAAAAACAATCCAAGACCCCTGAAATATACTTGGCATATCGA
AATTTTATGATTGACACATACCGTCAAAACCTCAAGAATATTTAACAGCACTGCTTGGCGGCAAAAC



[View online >](#)

TGACTGGAGATGTGTGCTGTGATGAGGGTTCATGCCTTCTTAGAGCAGTGGGGTCTTGTAACTACCA
 AGTTGACCAGAGAGTCGACCCATGGCAATGGGACCTCCTCCACTCCTCACTTCAATGTGTAGCTGAC
 ACACCCCTCGGGCTGTGCCCTGCATCTTCGATCACCTCAGGTCCTGCCGCTCAACAGATGTTAAATT
 TTCCTGAGAAGAACAAGGAAAACCAATTGATTTGCAAACTTTGGTCTTCAACTGACATTTACTCCAA
 GAAAACACTGGCAAAGAGTAAAGGTGCTAGTGTGGAAGGGAGTGGACAGAACAGGAGACCCCTTCTCTC
 CTAGAGGCTCTGGAGATGTACAAGGACGATTGGAATAAAGTGCAGAACATGTTGGAAGCCGATCTCAGG
 ACGAATGCATCCTCCACTTTCTGAGGCTCCCAATTGAGGACCTTACCTTGAAAATTCAGATGCTTCTCT
 TGGGCCACTGGCTTACCAGCCTGTCCCTTTCAGCCAGTCGGGAAACCCGGTGTAGCAGACTGTTGCCTTT
 TTAGCATCTGTGCTTGACCCCGTGTAGCATCTGCTGCAGCAAAAAGCAGCGTTGGAGGAGTTTTCTCGTG
 TCCGAGAAGAAGTACCCCTGGAATTGGTTGAAGCACATGTCAAGAAAGTACAGGAAGCTGCAAGAGCCTC
 TGGGAAGTGGACCCACCTATGGCTTGGAGAGCAGCTGTATTGCTGGCACAGGGCTGACGAGCCAGAG
 AAGCTTGAAGGATCTGAAGAAGAGAAGTGAACACAGATCCTGATGGTCAAGCAGCCTGAAAAGGCAGAAA
 ACAAGTGGAAAATGAATCGGATGAAGGTGATAAAATACAAGTCGAGAGAATGAAAAAACACTGAGAA
 GGAACAAGATAGTGACGTCAGTGAAGGTGCAAGCCAGAAGAAAAGGAGAATGAAGAGAACAAGAGCTC
 ACTGATACATGTAAGAAAAGAGAAGCGATGCCGGGAAGAAGAAAAGTGAACACGAGATTTCCGAAGGAA
 ACGTTGCCACAGCCGACGAGCTGCTCTGGCCTCAGCTGCTACTAAAGCCAAGCAGCTGGCGGCTGTTGA
 AGAAAAGAAAATCAAGTCTTGGTAGCTCTCTGGTTGAAAACACAAAATGAAGAACTAGAGATCAAATCT
 CGACATTTTGAAGAGCTGGAGACTATAATGGACAGAGAGAAAAGAGGCTCTAGAACAACAGAGACAGCAGT
 TGCTTACTGAGCGTCAGAACTTCCACATGGAACAGTTGAAATA TGCTGAACTACGTGCCCGCAGCAAAAT
 GGAGCAGCAGCAGCAGCATGGCCAGACCTCAGCAGGCGCACCAGCACACGGGAGGGCCGGGATGGCC
 CCCTTGGAGCCACAGGCCACCTGGCATGATGCCGCATCAGCAGCCCCCTCCCTACCCACTGATGCACC
 ATCAGATGCCGCCACCCCATCTCCCAACCAGGTCAAATACCAGGCCCTGGCTCCATGATGCCTGGCCA
 GCCCATGCCAGGTGCATGATCCCGCTGTGGCAGCCAACATCACCTACTGGGAGTGGCCCTACCCCT
 CCTGGTATGCCTCCAATGCCCGAAACATCTTAGGACCCCGGGTACCCCTCACAGCAACAAACGGCATGT
 ATCCTCTCCACCACAGCAGCAGCAGCCGCTCCTCTGCAGATGGGGTCCCTCCACCTCCTGCTCCAGG
 CCCACCCGCTCGGCCACTCCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR225193 representing NM_009211
 Red=Cloning site Green=Tags(s)

MAATAGGGPGAAAGAVGAGGAAAASGLAVYRRKDGGPASKFWESPDTVSQLDVSRVWLGKHYKKYVHADA
 PTNKTLAGLVVQLLQFQEDAFGKHVTNPAFTKLPKCFMDFKAGGTLCHILGAAYKYKNEQGWRRFDLQN
 PSRMDRNVEMFMNIEKTLVQNNCLTRPNIYLPIDIDLKLANKLKDIKIRHQGTFTDEKSKASHHIYPYPS
 SQEDEEWLRPVRRDKQVLVHWGFYPDSYDTWVHSNDVDAEIEDAPIPEKPKVHVHWIILDVDFNEWMN
 EEDYEVDENRKPVSFRQRISTKNEEPVRSERRDRKASANSRKRKPSPPPPPTATESRKKSGKKGQASL
 YGKRRSQKEEDEQEDLTKDMEDPTVPVNIIEVVLKPNVNPCKDSENTPVKGGTVADLDEQDEEAVTTGGK
 EDEDPSKGDPSPRSVDPGEDNVTEQTNHIIIPSYASWFDYNCIHIERRALPEFFNGKNKSKTPEIYLAYR
 NFMIDTYRLNPQEYL TSTACRRNLTGDVCAVMRVHAFLEQWGLVNYQVDPESRPMAMGPPPTPHFNVLAD
 TPSGLVPLHLRSPQVPAQQMLNFPEKNKEKPIDLQNFGLRDTDIYSKKTAKSKGASAGREWTEQETLLL
 LEALEMYKDDWNK VSEHVGSR TQDECILHFLRLPIEDPYLENSDASLGPLAYQPVPFSQSGNPVMSTVAF
 LASVVDPRVASAAAAL EEF SRVREEVPLELVEAHVKKVQEAARASGKVDPTYGLESSCIAGTGPDEPE
 KLEGSEEEKMETDPDGGQPEKAENKVENESDEGDKIQDRENEKNTKEQSDVSDVDKPEEKENEENKEL
 TDTCKERESDAGKKKVEHEISEGNVATAAAAAASAATKAKHLAAVEERIKSLVALLVETQMKKLEIKL
 RHFEEL ETIMDREKEALEQQRQQLLTERQNFHMEQLKYAELRARQQMEQQQHQGQTPQQAHQHTGGPGMA
 PLGATGHPGMMPHQPPYPPLMHHQMPPHPHPQGPQIPGPGSMMPGQMPGRMIPAVAANIHTGSGPTP
 PGMPMPGNILGPRVPLTAPNGMYPPPPQQQPPPPADGVPPPPAPGPPASATP

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

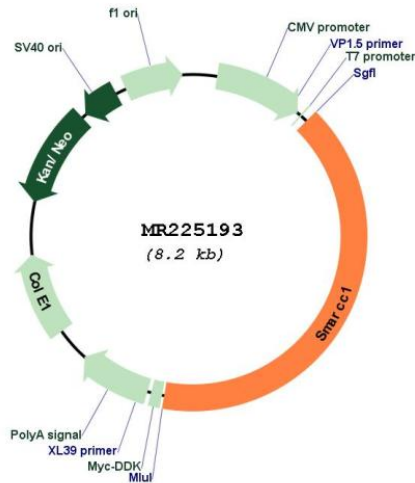
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_009211

ORF Size: 3312 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:	<ol style="list-style-type: none">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:	<u>NM_009211.2</u> , <u>NP_033237.2</u>
RefSeq Size:	5684 bp
RefSeq ORF:	3315 bp
Locus ID:	20588
UniProt ID:	<u>P97496</u>
Cytogenetics:	9 F2
MW:	123.3 kDa
Gene Summary:	<p>Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Component of SWI/SNF chromatin remodeling complexes that carry out key enzymatic activities, changing chromatin structure by altering DNA-histone contacts within a nucleosome in an ATP-dependent manner. May stimulate the ATPase activity of the catalytic subunit of the complex. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a postmitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to postmitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the self-renewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth. [UniProtKB/Swiss-Prot Function]</p>