

Product datasheet for SC115166

SMARCAL1 (NM_014140) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMARCAL1 (NM_014140) Human Untagged Clone
Tag:	Tag Free
Symbol:	SMARCAL1
Synonyms:	HARP; HHARP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC115166 sequence for NM_014140 edited (data generated by NextGen Sequencing)

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ATGTCCTTGCCTCTTACAGAGGAGCAGAGGAAAAAGATTGAAGAGAATCGACAAAAGGCT
CTGGCCCCGAGAGCTGAGAAGTTATTGGCAGAACAGCATCAGAGGACTAGCTCGGGCACC
TCCATTGCTGGCAACCCATTCCAGGCCAAGCAAGGCCATCCCCAAAATTTCCCAAGGGAG
TCTTGTAAGCCAGTGAGCCATGGTGTCTTTTTCAAGCAACAGAATCTCAGTAGCTCATCT
AATGCTGACCAAAGACCTCATGATTTCCACAGTTTTCCAGGCAAAGGGAATATGGAAAAAG
CCAGAAGAAATGCCACAGCCTGCCAGGCCACAGTCCACGTAGTCAAATGGCTCTCACT
GGAATCTCTCCTCCCTTGGCACAAAGTCTCCAGAGGTCCTAAACAACAGCTCTTGAGT
TATGAGTTAGGTCAAGGTCATGCTCAGGCTTACCTGAGATCAGGTTACACCCTTTGCT
AACCCAACTCATAAGCCTCTGGCCAAACCAAGAGTTCCCAAGAGACACCAGCTCATTCC
TCTGGACAGCCTCCAGGGATGCTAAGTTAGAGGCCAAGACAGCAAAAGCCTCCCCTTCC
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GTGTTTAAAGCCCTGCCAGCAAGAAATATGATCCTGACACCAAGACGTGGAACCTCAGC
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CCTCTGGAATGGGCCTATGGCAGCAGCGAGTACCCTCCACCAGCAGTGAGGGACAGGCC
GGCCTTCCATCAGCTCCATCCCTTTTCATTTGTCAAAGGGCGATGCATGCTCATCTCCAGG
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CTCACCTGGCGTTTGTCTCAGCTCAAGAAGACATCTCAGTCTCACGCCAGATGTC
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GGCCTGGGAAGACCATCAAGCCATCTGCATCGCAGCCTTTTACCGGAAGGAGTGGCCG
CTCCTGGTGGTGGCCATCCTCCGTGCGCTTACCTGGGAGCAGGCCTCCTTCGGTGG

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CTGCCATCTCTGAGCCCAGATTGCATCAACGTCGTGGTGACTGGGAAGGACCGCCTGACA
 GCTGGCCTGATCAACATTGTCAGCTTTGACCTTCTTAGCAAGTTGGAAAAACAGTAAAA
 ACCCCTTTTAAAGTTGTCATCATTGATGAATCTCACTTCCCTCAAAAACAGTAGGACTGCC
 CGCTGTCGAGCAGCTATGCCGGTCTAAAGTTGCCAAGAGGGTGATCCTGTTGTCGGGC
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 AACATGGGAGACACCCTGGATGAAAGCTCATTGACAGCCAGTCCACAGAAGAAAAGGAGA
 TTTGAATTTTTGATAACTGGGACAGCTTACGTCTCCCTGTAA

Clone variation with respect to NM_014140.3

**5' Read Nucleotide
Sequence:**

>OriGene 5' read for NM_014140 unedited
 AGCATTTTGTAAACGACTCACTTATAGGGCGGCCGGAATTCGCACGAGGCGCCCGCTT
 ACCTTGAGGCTGGGTTGGAAAAAGATATGTTAGCAAGTGTACGCCATGCTTTTGGCAAC
 TTTCCAATTAAGGTTGACATTCCTGCATAAGCATTTCTGTGAAAATGTCCTTGCCTC
 TTACAGAGGAGCAGAGGAAAAAGATTGAAGAGAATCGACAAAAGGCTCTGGCCCGCAGAG
 CTGAGAAGTTATTGGCAGAACAGCATCAGAGGACTAGCTCGGGCACCTCATTGTGGCA
 ACCCATTCCAGGCCAAGCAAGGCCCATCCAAAATTTCCAAGGGAGTCTTGTAAGCCAG
 TGAGCCATGGTGTCAATTTCAAGCAACAGAATCTCAGTAGCTCATCTAATGCTGACCAA
 GACCTCATGATCCCACAGTTTTAGGCAAGGGAATATGAAAAAGCCAGAAGAAATGC
 CCACAGCCTGCCAGGCCACAGTCCACGTAGTCAAATGGCTCTCACTGGAATCTCTCCTC
 CCTTGGCAGAAAAGTCTCCAGAGGTCCTAAACAACAGCTTTGAGTTATGAGTTAGGTC
 AAGGTCATGCTCANGCTTACCTGAGATCAGGTTACACCCTTTGCTAACCCAACCTCATA
 AGCCTCTGGCCAAACCAAGAGTTCCCAAGAGACACCAGCTATTCTCTGGACAGCCTC
 CCAGGNATGCTAAGNTAGAGGCCAAGACAGCANAAAGCCTCCCTTCGNNGCAGAACATTT
 CTTACATCCATTCTAGCTCAGAGAGTGTAAAGCCAGNACAGAANGAAGACTNCAGCAGA
 AGTCAGGGTCTCAGTCCANAAGGAGTGAACCTCAAANGGAAAGTGCCTAGGAAACGCG
 ATCGNTTCCAGTGTGATTGGTACATGCGAACTCATGCATGTTAAGACCTGCCACAGAA
 TATGACCTGAC

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_014140 unedited ACCGTAAGTGCATATTTTCATTTCTGGCCATGATTTAAAAGCTTTTTATTTTTTTCTTTT TGCCCCTTTTACAGGGGAGACGTAAAGCTGTCCCAGTTATCAAAAAATCAAATCTCCTT TTCTTCTGTGGACTGGCTGTCAATGAGCTTTTATCCAGGGTGTCTCCCATGTTCTGGGAA CTACTTCCAGATGTTCTGAAGCACTTCTGGGTCAAAGGACTCTGCTGCTTCCAGGAGC TCCATATCACTTCTTCTTCTCAAAGGACTTCTGGAATAGTTCGTAGATCTTCTGCTGC TTTGGTCTTGTGCGAGTAATCAGTGGATTCTGTCATTACTCAAAAATGGTCTCACAA AGGCCGGCTCAGTGCCACAACCTCGACCTTCTTGTATCAGGGGCCGACGGCACTCATC ACCCTGTGCCCTTGAGGCACGCGGCCAATGCCACCGACCTGAACCTACCGCTGCTC GCCCGACCGCCCGTTGCTGCGCCGCCCGGGCGCCGCTTTCTTTGACGCGGCACCCG TTGATCACGCGGGGTACACGCTGTCTGCTCTACTCTATTGCGCCTCGCCCCCGCCT CGCTGTGACCCCCCTCGTATACCGCCCCCGACCGCTCTCCCCCTACGGCCCTCG CCGCCCGCCCTACCGTCTTTCTGGCGCCCGTGGGTCTCCCTCCGCCCGCCGCC CCCCCTCCCCCTCCCCGACAGCTCTCCCCGTTTGGCCGCCACCGCCTCCCGCC AGCGTTGGTCTCGCGAGCACGGTGCCGCGCAACGCGATGCTGCGCTCGTGCCGCGGAT ACGCACACCGACCGCGGCCGATTTCCAGTATATCCATATGGTTCTATCTCGCGACT CGCCCCGAGCTGGGTCCATTACACCGCTACCTCAGCTCGATGCCGCCAGTATT
Restriction Sites:	NotI-NotI
ACCN:	NM_014140
Insert Size:	3440 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	NM_014140.2 , NP_054859.2
RefSeq Size:	3041 bp
RefSeq ORF:	2865 bp
Locus ID:	50485
UniProt ID:	Q9NZC9
Cytogenetics:	2q35
Domains:	SNF2_N, DEAD, helicase_C
Protein Families:	Druggable Genome

Gene Summary:

The protein encoded by this gene is a member of the SWI/SNF family of proteins. Members of this family have helicase and ATPase activities and are thought to regulate transcription of certain genes by altering the chromatin structure around those genes. The encoded protein shows sequence similarity to the E. coli RNA polymerase-binding protein HepA. Mutations in this gene are a cause of Schimke immunoosseous dysplasia (SIOD), an autosomal recessive disorder with the diagnostic features of spondyloepiphyseal dysplasia, renal dysfunction, and T-cell immunodeficiency. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (1) represents the longer transcript. Variants 1 and 2 encode the same protein.