OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR211150

Smarcal1 (NM_018817) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smarcal1 (NM_018817) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Smarcal1
Synonyms:	6030401P21Rik; AI851716; Mharp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR211150 representing NM_018817
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCCTTGCCACTTACAGAGGAGCAGAGGAAAAAGATTGAAGAGAATCGGCAAAAAGCTTTGGCCCGTC
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CAAGCAGGGCTCTCTCCTGAATCTCCTAGCGGAGCCTTCAAAGCCAGTGGGCCATGCCTCCATTTTCAAG
CAACAGAATCTCAGTAATTCATTTCCTACTGATCAGAGACCTCACAGCTCCCGCTGTTCTCAGCCCAGCC
CAGCAGAGGAAACGACGGGGCTATGGAAGACCCAAGGAGAGATGTCCACAGCCTGCCCAAAGCCTAACCC
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GAGACCCCCAAACATACTGCAAACCACACCCCAAAACACAGGCTTTCTACGGGGAGCGTGCATAAAGACT
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GACACTATGATTCTTTTACAAAGACCTGGGACTTCAGCATGAGCGACTACAGAGCCTTGATGAAGGCAGT
CGAGCGACTCTCCACGGTCTCCCTGAAGCCACTGGACGAGGCTGGTGGCAGTGTTGGAGGACAGACCAGC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211150 representing NM_018817
Red=Cloning site Green=Tags(s)

MSLPLTEEQRKKIEENRQKALARRAEKLSEQPQSAASGSSAAGPSQSKQGSLLNLLAEPSKPVGHASIFK
QQNLSNSFPTDQRPHSSRCSQPSPAEETTGLWKTQGEMSTACPKPNPSPPGASNQPLLGYKSSEGQPQAT
WDTGASSSGPFPRDPELEAKAARPSTSRQSISDSFYVLGGKTPRTEGRPPNILQTTPQNTGFLRGACIKT
GDRFRVKIGYNQELIAVFKSLPSRHYDSFTKTWDFSMSDYRALMKAVERLSTVSLKPLDEAGGSVGGQTS
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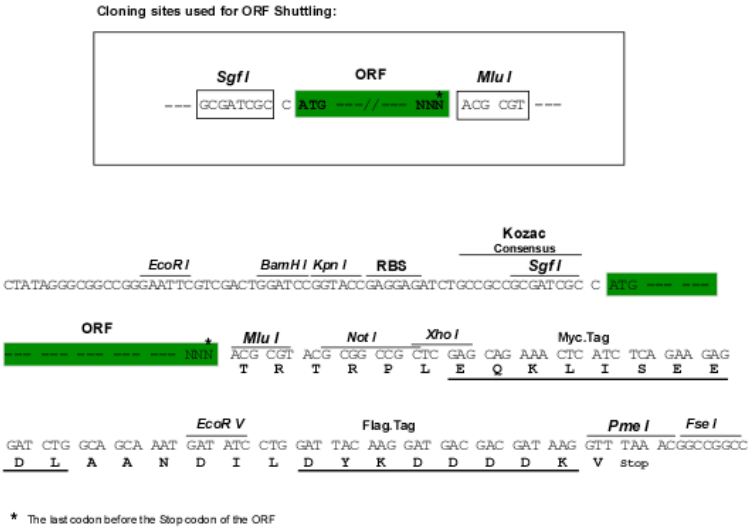
RAKAALDAAAKEMTKDKTKQQQKEALLVFFNRTAEAKIPCVVEYILDLLDSGREKFLVFAHHKVILDAVA
KELERKNVQHIRIDGSTPSADREAQCQRFQLSKGHTVALLSITAANMGLTFSTADLVVFAELFWNPGVLI
QAEDRVHRIGQTNSVSIHYLVAKGTADDYLWPLIQEKIKVLGEAGLSETNFSEMTEATDYVHKDPKQKTI
YDLFQQSFEDDGNDMEFLEAAESFELGSTSGTSGNISQDLGDLLDEDEGSPPKKSRFEFFDNWDSFSSPF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9039_f04.zip

Restriction Sites: SgfI-MluI

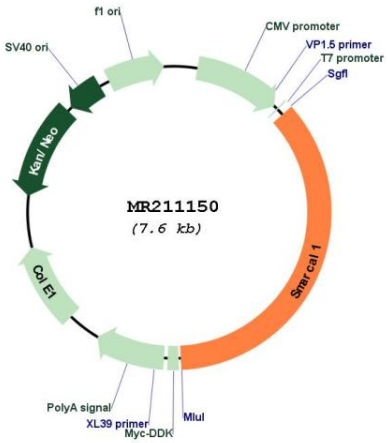
Cloning Scheme:



ACCN: NM_018817

ORF Size:	2730 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_018817.2, NP_061287.2
RefSeq Size:	6715 bp
RefSeq ORF:	2733 bp
Locus ID:	54380
UniProt ID:	Q8BJL0
Cytogenetics:	1 36.72 cM
MW:	101.3 kDa
Gene Summary:	ATP-dependent annealing helicase that binds selectively to fork DNA relative to ssDNA or dsDNA and catalyzes the rewinding of the stably unwound DNA. Rewinds single-stranded DNA bubbles that are stably bound by replication protein A (RPA). Acts throughout the genome to reanneal stably unwound DNA, performing the opposite reaction of many enzymes, such as helicases and polymerases, that unwind DNA. May play an important role in DNA damage response by acting at stalled replication forks (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211150