

Product datasheet for **MG211150**

Smarcal1 (NM_018817) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smarcal1 (NM_018817) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Smarcal1
Synonyms:	6030401P21Rik; AI851716; Mharp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG211150 representing NM_018817
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCTTGCCACTTACAGAGGAGCAGAGGAAAAAGATTGAAGAGAATCGGCAAAAAGCTTTGGCCCGTC
 GAGCTGAGAAGTTGTGAGAACAGCCACAGAGCGCAGCTTCAGGCTCCTCTGCTGCCGGCCCGTCCCAGTC
 CAAGCAGGGCTCTCTCCTGAATCTCCTAGCGGAGCCTTCAAAGCCAGTGGGCCATGCCTCCATTTTCAAG
 CAACAGAAATCTCAGTAATTCATTTCTACTGATCAGAGACCTCACAGCTCCCGCTGTTCTCAGCCCAGCC
 CAGCAGAGGAAACGACGGGGCTATGGAAGACCCAAGGAGAGATGTCCACAGCCTGCCCAAAGCCTAACCC
 AAGTCTCCAGGAGCCTTAACCAACCCTTTTGGGTTATAAATCCAGCGAGGGTCAACCCAGGCAACC
 TGGGACACAGGAGCTTCTCTTCTGGACCATTCCCAGGGACCCGAGTTAGAGGCCAAGGCAGCAAGGC
 CTTCCACCTCTAGGCAGAGCATTTCGGACAGCTTTTATGTGTTAGGGGAAAAACACCTAGGACAGAAGG
 GAGACCCCAACATACTGCAAACCACACCCCAAAACACAGGCTTCTACGGGGAGCGTGCATAAAGACT
 GGGGATCGCTTCCGGGTAAGATCGGCTACAACCAAGAGCTCATTGCCGTGTTTAAAGTCTCTGCCAGCA
 GACACTATGATTCTTTTCAAAGACCTGGGACTTCAGCATGAGCGACTACAGAGCCTTGATGAAGGCAGT
 CGAGCGACTCTCCACGGTCTCCCTGAAGCCACTGGACGAGGCTGGTGGCAGTGTGGAGGACAGACCAGC
 CTTCCCTCAGCTCCATCCCTGACCTTTGTGACAGGGAAGTGATGCTCATCTCTCGAGTCCGCTTCGAGG
 TTGACATCGGCTATTCGGAGGCGGTGATTGGCCTGTTTAAACAGATGGAGTCCAGGAGTTACGATATCAA
 GACCAGGAAGTGGAGTTTCTCTTGAAGAGCACAAATAAATAATTGCAAGGTACAGTGAAGTGAAGCAA
 GTTCAGCTGGACCACTGCCAAGACAGTGACCCTGGCATTGTCATCTCAGCTGGAGAAAACGCTCCCA
 AACTGAAAGCAGACGTGCCAGAAGCGGACCTTTCCGGAGTGGATGCCAAGCTTGTGCTAGCCTCATGCC
 CTTTCAGAGGGAGGGAGTTAGCTTTGCCATATCAAAAAGAGGCCCGCTGCTACTTGCCGATGACATGGGC
 CTAGGGAAGACCGTCCAAGCCATCTGCATAGCAGCTTTTACCAGAAAGGAATGGCCACTGCTGGTGGTCTG
 TGCCTTCTCTGTGCGCTTACCTGGGAGCAGGCTTTCTTCGGTGGCTTCCATCTCTTAGCCCAGAGAA
 CATCAACGTGGTGGTACCCGGGAAGGGCCGCTAACAGCTGGCTTGGTCAATATTGTCAGCTTTGACCTC
 CTTTGAAGTTGGAGAGGAGCTAAAAACCCCTTCAAAGTCGTATTATTGATGAATCACACTTCTCA
 AGAACATAAAGACTGCCCGCTGCCGAGCAGCTGTGCCTATCCTAAAGGTTGCCAAGAGGGTATCCTACT
 GTCAGGCACACCCGCCATGTCTCGGCCGACAGCTCTACACGCAGATCATTGCTGTCAAGCCAACCTTC
 TTCCTCAGTTTTCATGCCTTTGGACTCCGCTACTGTGACGCCAAACGGCTCCCTTGGGGCTGGGACTACT
 CAGGCTCCTCAAACCTGGGCGAGCTGAAGCTGCTGCTAGAGGAAGCAATCATGCTGCGGGCCCTCAAATC
 CGACGTGCTCTCCAGCTTCCGGCCAAGCAGCGCAAGATGGTGGTGGTCAACCCTGGTCCGATCAGCTCC
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 AAGCTCTCCTTGTCTTCTTCAACAGAACAGCAGAAGCTAAAATCCCATGTGTGTCGTCGAGTATATCCTGGA
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 CAGGCCGAGGACCGTGTGCACCGCATTGGACAGACAAACTCTGTGAGCATCCACTACCTGGTGGCAAAAAG
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 TGAGACCAATTTCTCGGAAATGACGGAAGCTACAGACTACGTGCACAAGGACCCAAAGCAGAAGACGATC
 TATGACCTGTTCCAGCAGTCTTTGAAGACGATGGAAAATGACATGGAATTCCTGGAAGCAGCAGAGTCTT
 TTGAGCTAGGAAGTACTTCAGGAACCTCTGAAACATTTCCAGGATCTGGGAGATCTCTTAGATGAAGA
 CGAAGGCAGTCCGCCAAAGAAAAGCAGATTTGAATCTTTGATAATTGGGACAGCTTTTCTCTCCCTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - **GTTTAA**

Protein Sequence: >MG211150 representing NM_018817
 Red=Cloning site Green=Tags(s)

MSLPLTEEQRKKIEENRQKALARRAEKLSEQPQSAASGSSAAGPSQSKQGSLNLLAEPSPKPVGHASIFK
 QQNLSNSFPTDQRPSSRCSQPSPAEETTGLWKTQEMSTACPKPNPSPPGASNQPLLGYKSSGEGPQAT
 WDTGASSSGPFRDPELEAKAARPSTSRQSIDSFYVLGGKTPRTEGRPPNILQTTPTQNTGFLRGACIKT
 GDRFRVKIGYNQELIAVFKSLPSRHYDSFTKTWDFSMSDYRALMKAVERLSTVSLKPLDEAGGSVGGQTS
 LPSAPSLTFVTGKCLISRVRFVDIGYSEAVIGLQKQMESRSYDIKTRKWSFLL EEHNKLIARSRELKQ
 VQLDPLPKTVTLAFASQLEKTSPLKADVPEADLSGVDAKLVSSLMFPQREGVSFAISKRGRLLLADDMG
 LGKTVQAICIAAFYRKEWPLL VVVPSSVRF TWEQAFRLWLPSPENINVVVTGKGR LTAGLVNIVSFDL
 LCKLERQLKTPFKVVIIDESHFLKNIKTARCRAAVPILKVAKR VILLSGTPAMSRPAELYTQIIAVKPTF
 FPQFHAFGLRYCDARLPWGWDYSGSSNLGELKLLLEA IMLRRLKSDVLSQLPAKQRKMVVVNPGR ISS
 RAKAALDAAAKEMTKDKTKQQQKEALLVFFNRTAEAKIPCVVEYILDLLDSGREKFLVFAHKKVILDAVA
 KELERKNVQHIRIDGSTPSADREAQCQRFQLSKGHTVALLSITANMGLTFSTADLVVFAELFWNPGLVI
 QAEDRVHRIGQTNVSVSIHYLVAKGTADDYLWPLIQEKIKVLGEAGLSETNFSEMTEATDYVHKDPKQKTI
 YDLFQQSFEDDGNDMEFLEAAESFELGSTSGNISQDLGDLLEDEGSPPKSRFEFFDNWDSFSSPF

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

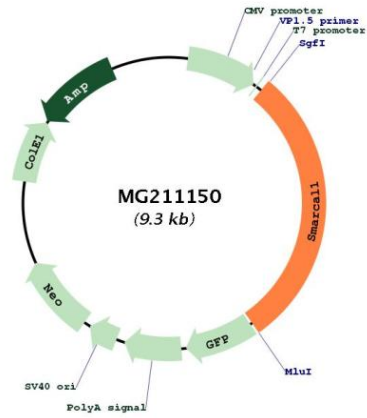
Cloning Scheme:

Cloning sites used for ORF Shuttling:



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:	<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_018817.2 , NP_061287.2
RefSeq Size:	6715 bp
RefSeq ORF:	2733 bp
Locus ID:	54380
UniProt ID:	Q8BJL0
Cytogenetics:	1 36.72 cM
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 MG211150