

## Product datasheet for MR212063

### Shprh (NM\_001077707) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Shprh (NM_001077707) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Shprh
Synonyms:	2610103K11Rik; AA450458; AU024614; BC006883; D230017O13Rik; E130018M05
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR212063 representing NM_001077707 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCAGCCGAAGGAAACGTGCTCCCCGATGAAGGTCGATGAAGAAAGGCAACAGCAGCTTCACTGGA  
ACATGCATGAGGACCTGAGGAGTGAGCCGCTCACCATGACGGTCGGGGAACAGGCCTGTTTCAGATGCAGA  
CTCTTCTTCTGATTGCATCATCATCGATGAAGGCCCTCCTGAGAGTGCACCTTACAGAGATAAGAAGAGG  
CGTTCAGAGACTGTGAGCGTCTTAGAGGCCACCGAGGAAGAGACCCGTTTGTCTGTGACTTTGAATGTTA  
CAGTTTCTCCCTATCGTGTGGATAATTCTTGAAAGCATTCTGGGAGATTTTGTCTTTCAGCTTCTCCC  
CAAAGAGAGTTTAGTTGAACATTTTTCTGAAAGGACTTTTACATTGAGTCCTTCAGAGTCAAGCAGTCAG  
TTCTGATCTATGTTTATTTCAGAAATGTAAGAAATGTAGAGAAACAAGAAATGTTCTTGAAGGATCAGCCG  
GTGTTTGTAGCAAGGGAATCCGAGTGGAAATCCTCCTTCAGTAGTGACATGTTACAGGATTTGGCCTGGCT  
ACAGAAGAGAAGAGGAATAAACTCTACCAGAGACCAGACGGCACTCACACAATCAAGTTTGAATTTAC  
ATTTTGAAGCTGGCCTAACAGACTAGACTTCATGAGTGATGCAGGTTCCAGAATGAAAAAGTTCAATC  
AGCTCATGAAGAGAGTGATGGAAAAGTTACATAATTTTATTATCCAGATGTGCTGGAAGAAGAGGAGGA  
GGGTTTCAGAGAGCGAGCCCGAGGGTCAGGATATTGATGAGCTCTACCTTTGTGAAGCAACACACCAG  
CAAGAAACACGGTCAGTCCAAGTGGACGTCCAGCACCTCGGTTGATTCCGGTCTGAGACCTTACCAGA  
GAGAGGCAGTCAACTGGATGCTGCAGCAAGAGCAGTTTCAGAAGCGCTCCTCTGCTGATAAATCCCTGCA  
CTTCTTATGGCGAGAAATGTTACACCTGATGGCTTGAAGTCTACTATAATCCATATACAGGCTGCATC  
ATTCGAGATTTCCACATGCGGGTCCACAGTTGCTTGGTGAATCTTAGCAGATGAGATGGGCTTGGAA  
AGACAGTGGAGTTCTGGCTCTGATTCTGACACATACCCGACAAGACGTCAAGCAGGACGCTCTCACCT  
TCCTGAGGAAAAGTGGTAAATTTTTCATCCCAACTCACTGTCTAGAGAAAAAGTAAAAATAGAGAA  
ATCCAGGATACAGAATATGAACCAAAAGAGAAAGTTCACTGCCCTCTACACGTGTGATGATCCTGACAG  
CTGTGAAAGAAAATGAATGGGAAGAAAGGAGTTTCTATTCTTCTATCTATAAGTATGTCAGTCCATATT  
CAGATATGATGTTTCAGCGGAACCGGGTCTTCTGAAGCGGATGTTGAAATGTTTAACTTTTGAAGGCTT



GTGAAACAGATCAAAGGCCATGGTTTCTCTGGGACTTTTACACTGGGAAGAATTACAAAGAAGATGTAT  
 TTGATAAAACAAAAAGCAGGCAGTAGGGAGTCCAAGGAAAATTGAGAAGGAATTGAGGAAATCAGTGAA  
 CAAGGATGCAGATTCTGAGTACCTGCCATCAAACACTTCTGATGACGATGAGCCTTACTATTACTGT  
 AAGGCGGGAAAAAGCCGGAGTAAGTTGAAGAAGCTGCTTACTAACTAAAAAGGAAAGGGTCAGTCTG  
 TTCATCTGGATTCCCAAGGTGATGCTCCAGCTGCTGGAGTCTGTGCAAGTACTGATGTTTCATGTGTCAGA  
 AAATACATGTGTCTCTGAAGACAAGCAAACCAAGAAGCAAAGACTGTGCTGAGTCGCCAAACCCCTGCT  
 GCCGAGGAGTTGGCACAGTCTAACACTTCAAGTCTTGTGAAACCTCTGATTACCGCTTTGAGTGTATAT  
 GTGGTGAATTTGATCAAATTGGCCACAAGCCAAGAGTTCAATGTCTGAAGTGTACCTGTGGCAGCATGC  
 AAAGTGTGTGAATTATGAGGAGAAAAACCTGAAGGTTAAGCCTTTTTACTGCCCCACTGTCTTGTGCG  
 ATGGAGCCAGTATCAACAAGAGCAACTCTGATCATCTCTCCGAGCTCCATTTGCCACCAGTGGTGGATG  
 AAATCAATCGGCACGTGAGGTATCATCTCTCCGAGTTCTGGTATATCAAGGAGTGAAGAAACACGGCTT  
 CTTACAGCCTCATTTTTTGGCAGAACAAGATATAGTTATCATTACCTATGATGTTCTTCGTTCAGAACTA  
 AACTATGTCAATATCCCACATAGCAATAGTGAAGATGGGCGTCGCTGAGGAACCAGAAGCGCTATATGG  
 CCATTCCCAGCCCCTTGGTAGCGGTGGAATGGTGGAGGATCTGCCTTGATGAAGCTCAGATGGTCGAGTG  
 TCCTACAGTAAAAGCCGCGGAAATGGCCAGCCTTGGAGCGGATTAATCGGTGGTGCATCAGTGGCACT  
 CCAGTTACAGAGAGATTGGAAGATCTTTTTGGGCTGGTGGTCTTCTTGGAAATTGAACCTTATTGTGTCA  
 AACACTGGTGGATTCCGGCTTCTCTATCATCCATACTGCAAGAAAAATCCTCAGCACCTGTACAGTTTTAT  
 TGCCAAGATAATGTGGAGGTCTGCAAAGAAAGATGTCATTGACCAAAATCCAGATTCACCTCAGACTGAA  
 GAAATGCACTGGCTCCATTTTTCCCGGTGGAGAGGCAATTTCTATCACCGCCAGCACGAGGTGTGCTGCC  
 AGGATGCCATAGTGAAGCTCAGGAAGATCTCTGACTGGGCCCTGAAGCTCAGCAGCTTGGACAGGAGAAC  
 TGTCTCCTCCATCCTCTACCCACTGCTGAGGCTCCGGCAGGCTGCTGCCATCCACAGGCTGTTTCGTTGG  
 GAATCTTGGCACTCCAGAAGAGCACCATGACAATGGAAGAGTTGCTGACATCTGCAGAAGAAATGTG  
 GAACGGAATGTGAAGAGGCCACCGACAACACTAGTTTGTGCCCTAACGGCTTAGCAGGCAATTCACATCAT  
 TAAAGGTGAATATGCCTTGGCAGCGGAGCTCTACAGAGAAGTATTACGTTTCATCTGAGGAGCACAAGGA  
 AAACCTCAAACCTGATTCCCTTCAAAGACTGCATGCCACACATAACTTAATGGAGCTGTTGGGAGCCAAAC  
 ACCCAGGAATACCTCCCACCTTGAAGATGGCAGACTTGAAGAAGAGGCCAAGCAGCTGCGAGAGCACTA  
 TATGAGTAAGTGTAAACACAGAAGTTGCCGAAGCCAGCAAGCTTTCAGCCTGTGCAGCAGTCCATTAGG  
 GAGCTCCAAAGGAAGATTCAATTAATTTCTCTTGGTGGCTGAATGTAATCCATAGAGCAATGGAATTTT  
 CTGTTGATGAGGAACTTGTTCAGCGGTGCGAAATGAAATAAGCAGTAACACAAGCAAACTGACAA  
 GCTGTCTATGTCAGAGAAGTCCGTGACTGCAGAGGCTTTCAGTCTTACTTACAACACAATGGAAGAG  
 CTCATAAAGTCCAGAAGCTGGTGAAGGAGGCTGTGAAGAAGCTGGAGAAGCCTCCATCCCGGGAGGTGA  
 TTGAGTCTGCAACAGTTTGCACCTGCGCCAGCTAGACTCCCTCTCAACTGCTGCGTCTTTTGAAGC  
 TGATGAATTGTTACAGAGTATGAATCAAAGCTATTTTTAACACAGTCAAAGGCCAGACTGCAATCTTT  
 GAAGAAATGATAGAAGATGAAGAAGGACTTGTAGATGATAGAGTACCTACCCTACCAGAGGTCTGTGGG  
 CCGTAAGTGAACGAGCGATCTATGAAAGCAATATTATCATTGCAAGATCACATAGGTTTGTGTTGA  
 ATATGTAGATGAAGGAAGTGTTCATGGATCTCTTTGAGGATGGAAGAAGGAATAAAGTTACTTCAT  
 GAATACTGGATGACTCTGAGAAATCGTGTATCTGCTGTTGATGAACTTGAATGGCTACAGAGCGACTAA  
 GAGTGCCCATCCCAAAGAGCCAAAGCCAAACCCACCCGTCATCACATCATTGAACCACACGAGGTTGA  
 ACAGAATCGTATAAAACTGGTGAATGATAAAGCTGTTGCTACATCACAGCTTCCAGAAGAACTTGGACAG  
 CTTCTTTACCTAACGAATTTGGAGAAGTCTCAAGATAAAACATCAGGAGGTATAATCCAGAGCCTTGT  
 CAATCTGTGCTCGACAGCTGGGAAAACAGTGGGAGTGTGACCTGCGGACACTGCTTCTGTAATGAATG  
 CACTTCGATTATAAATGAACAGTACAGTGTGGGTCTCATCGAAGTTCCATCAAGTGTGCTATCTGCCGC  
 CAGACCACATCACAAAAGAGTCTCCTATGTCTTACCCTCAGAGAAGGCCAAACCAAGAGGATGATATCC  
 CTGTGAAGGGTAGCCATTCTACAAAAGTGAAGCTGTGGTCCAGAACTCTGATGAAAATACAACCTAGAGA  
 TCCAGGGGCCAAAGCGCTCGTTTTCTCAACGTGGCAAGATGATTAGATATTATTTCAAAGCTCTCACG  
 GACAACAACATGGAATTTACACAATCAGTCGCATTAAGACATTCAGGAGAACCCTCTCAGCGTTTAAAT  
 ACGATCCCACATCAATATTCTGCTGCTGCCCTGCACACAGGCTCTAATGGATTAATCATTTGAAGC  
 CACCCATGTCCTCTGGTGGAGCCATACTGAACCCTGCCATGAGCTGCAGGCCATTGGGAGAGTGCAC  
 CGAATTGGACAGACCAAACCTACTATTGTACATAGATTCTTAATTAAGCAACAATAGAAGAACGGATGC  
 AGGCAATGCTAAAACTGCTGAGAGGAGCCACACAAGCTCATCCGAAAGCATTCTGAAGCCTCTGTGTT  
 GACTGTGGCTGGCTGGCTGACCTGTTTACCAAGGAGAACGAGGAGCTTGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR212063 representing NM\_001077707  
Red=Cloning site Green=Tags(s)

MSSRRKRAPPMKVDEERQQQLHWNMHEDLRSEPLTMTVGEQACSDADSSSDCIIIDEGPPEALHRDKKR  
RSETVSVLEATEEETRLSVTLNVTVSPYRVDNSWKAFLGDFALQLLPKESLVEHFSERTFTLSPSESSQ  
FLIYVHSECKNVEKQENVLEGSAGVCSKIRVSESSDMLQDLAWLQKRRGIKLYQRPDGTHTIKVGIY  
ILEAGLTRLDFMSDAGSRMKNFLMQRVMEKLNHFIIIPDVLEEEEGSESEPEGQDIDELYHFVKQTHQ  
QETRSVQVDVQHPALIPVLRPYQREAVNWMLQQEQFRSAPPADNSLHFLWREIVTPDGLKLYNPNYTGCI  
IRDFPHAGPQLLGGILADEMGLGKTVEVLALILTHTRQDVKQDALTLPEGKVVNYFIPTHCPREKVNRE  
IQDTEYEPKEKVCPPTRVMILTAVKEMNGKGVSIISIYKYVSSIFRYDVQRNRGLLRMLKCLIFEGL  
VKQIKGHGFSGTFTLGKNYKEDVFDKTKKQAVGSPRKIEKELRKSVNKDADSEYLPNNTSDDDEPYYYC  
KAGKSRSKLKKPALLTKKGKQSVHLDSQGDAPAAGVCASTDVHVSENTCVSEDKQTQEAKDCAESPNA  
AEELAQNSNTSSPCETSDYRFECICGEFDQIGHKPRVQCLKCHLWQHAKCVNYEENLKVKPFYCPHCLVA  
MEPVSTRATLIIISPSICHQWVDEINRHRSSSLRVLYQGVKKGFLQPHFLAEQDIVIITYDVLRSSEL  
NYVNIHPSNSEDGRRRLRNQKRYMAIPSPLVAVEWWRICLDEAQMVECPYKAAEMAQRLSGINRWCISGT  
PVQRGLEDLFGLVVFLGIEPYCVKHWIIRLLYHPYCKKNPQHLYSFIAKIMWRSAKKDVIDQIQIPPQTE  
EMHHLHFSPVERHFYHRQHEVCCQDAIVKLRKISDWALKLSSLDRTVSSILYPLLRLRQACCHPQAVRG  
EFLPLQKSTMTMEELLTSLQKKGTECEEHRQLVCALNGLAGIHIKGEYALAAELYREVLRSSEEHKG  
KLKTDLSLQRLHATHNLMELLGAKHPGIPPTLRDGRLEEEAKQLREHYMSKCNTEVAEAQALQPQQSIR  
ELQRKIHSNSPWVNLVIHRAMEFSVDEELVQVRNEISSNYKQTDKLSMSEKFRDCRGLQFLLTTQMEE  
LHKFQKLVREAVKLEKPPSREVIIESATVCHLRPARLPLNCCVFCADLFTFEYESKLFNNTVKGQTAIF  
EEMIEDEEGLVDDRVPPTTRGLWAVSETERSMKAILSFARSHRFDVEYVDEGSVSMDFEAWKKEYKLLH  
EYWMTLNRVSAVDELAMATERLRVRHPKPKPNPPVHHIIEPHEVEQNRKLVNDKAVATSQLQKKGQ  
LLYLNLNLEKSQDKTSGGINPEPCPICARQLGKQWAVLTCGHFCNECTSIIIEQYSVGSHRSSIKCAICR  
QTTSHKEVSYVFTSEKANQEDDIPVKGSHSTKVEAVVRTLMKIQRLRDPGAKALVFSTWQDVLDIISKALT  
DNNMEFTQISRIKTFQENLSAFKYDPHINILLLPLHTGSNGLTIEATHVLLVEPILNPAHELQAIGRVH  
RIGQTKPTIVHRFLIKATIEERMQAMLKTAERSHTSSSGKHSEASVLTAVGLADLFTKENELEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9040\\_f02.zip](https://cdn.origene.com/chromatograms/mm9040_f02.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001077707

**ORF Size:** 5022 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\\_001077707.1](#), [NP\\_001071175.1](#)

**RefSeq Size:** 6966 bp

**RefSeq ORF:** 5025 bp

**Locus ID:** 268281

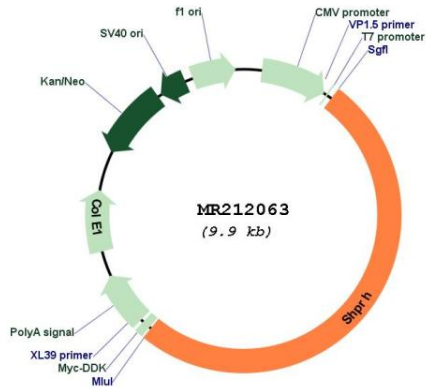
**UniProt ID:** [Q7TPQ3](#)

**Cytogenetics:** 10 A1

MW: 191.9 kDa

Gene Summary: E3 ubiquitin-protein ligase involved in DNA repair. Upon genotoxic stress, accepts ubiquitin from the UBE2N-UBE2V2 E2 complex and transfers it to 'Lys-164' of PCNA which had been monoubiquitinated by UBE2A/B-RAD18, promoting the formation of non-canonical poly-ubiquitin chains linked through 'Lys-63'. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR212063