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 MR211966

Wrn (NM_001122822) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Wrn (NM_001122822) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Wrn
Synonyms:	AI846146
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR211966 representing NM_001122822
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAACCACTTCACTACAGCGGAAATTTCCAGAATGGATGTCTATGCAGAGTCAAAGATGTGCTACAG
AAGAAAAGGCCTGCGTTCAGAAGAGTGTTCTTGAAGATAACCTCCCATTCTTAGAATTCCCTGGATCCAT
TGTTTACAGTTATGAAGCTAGTGATTGCTCCTTCCTGTCTGAAGACATTAGCATGCGTCTGTCTGATGGC
GATGTGGTGGGATTTGACATGGAATGGCCGCCCATATACAAGCCAGGGAAAAGAAGCAGAGTCGCAGTGA
TCCAGTTGTGTGTGTCTGAGAGCAAATGTTACTTGTTTCACATTTCTTCCATGTCAGTTTTCCCCCAGGG
ATTAAAAATGTTACTAGAAAACAAATCAATTAAGAAGGCAGGGGTTGGGATTGAAGGGGACCAGTGGAAA
CTTCTGCGTGATTTTGACGTCAAGTTGGAGAGTTTTGTGGAGCTGACGGATGTTGCCAATGAAAAGTTGA
AGTGCGCAGAGACCTGGAGCCTCAATGGTCTGGTTAAACACGTCTTAGGGAAACAACTTTTGAAAGACAA
GTCCATCCGCTGCAGCAATTGGAGTAATTTCCCCCTCACTGAGGACCAGAAACTGTATGCAGCCACTGAT
GCTTATGCTGGTCTTATCATCTATCAAAAATTAGGAAATTTGGGTGATACTGCGCAAGTGTTTGCTCTAA
ATAAAGCAGAGGAAAACCTACCTCTGGAGATGAAGAAACAGTTGAATTCAATCTCCGAAGAAATGAGGGA
CCTAGCCAATCGTTTTCCTGTCACTTGCAGAAATTTGGAAACTCTCCAGAGGGTTCCTGTAATATTGAAG
AGTATTTCAGAAAATCTCTGTTCATTGAGAAAAGTGATCTGTGGTCCTACAAACACTGAGACTAGACTGA
AGCCGGGCAGTAGTTTTAATTTACTGTCATCAGAGGATTCAGCTGCTGCTGGAGAAAAAGAGAAACAGAT
TGGAAAACATAGTACTTTTGCTAAAATTAAAGAAGAACCATGGGACCCAGAACTTGACAGTTTAGTGAAG
CAAGAGGAGGTTGATGTATTTAGAAATCAAGTGAAGCAAGAAAAAGGTGAATCTGAAAATGAAATAGAAG
ACAATCTGTTGAGAGAAGATATGGAAAGAACTTGTGTGATTCCTAGTATTTCAGAAAATGAACTCCAAGA
TTTGGAACAGCAAGCTAAAGAAGAAAAATATAATGATGTTTCTCACCAACTTTCTGAGCATTTATCTCCC
AATGATGATGAGAATGACTCCTCCTATATAATTGAAAGTGATGAAGATTTGGAAATGGAGATGCTGAAGT
CTTTAGAAAACCTAAATAGTGACGTGGTGGAACCCACTCACTCTACATGGTTGGAAATGGGAACCAATGG
GCGTCTTCCTCCTGAGGAGGAAGATGGACACGGAAATGAAGCCATCAAAGAGGAGCAGGAAGAAGAGGAC

View online »

CATTTATTGCCGGAACCCAACGCAAAGCAAATTAATTGCCTCAAGACCTATTTCGGACACAGCAGTTTTA
AACCGGTTCAGTGGAAAGTCATCCATTCTGTATTAGAAGAGAGAAGAGATAATGTTGTTGTCATGGCAAC
TGGATATGGGAAGAGTCTGTGCTTCCAGTATCCGCCTGTTTATACAGGCAAGATTGGCATTGTCATTTCA
CCTCTCATTTCCTTAATGGAAGACCAAGTCCTCCAGCTTGAGCTGTCCAATGTTCCAGCCTGTTTACTTG
GATCTGCACAGTCAAAAAATATTCTAGGAGATGTTAAATTAGGCAAATATAGGGTCATCTACATAACTCC
AGAGTTCTGTTCTGGTAACTTGGATCTACTCCAGCAACTTGACTCTAGTATTGGCATCACTCTCATTGCT
GTGGATGAGGCTCACTGCATTTCAGAGTGGGGCCATGATTTCAGAAGTTCATTCAGGATGCTGGGCTCTC
TTAAAACAGCGCTCCCATTGGTTCCAGTCATTGCACTCTCCGCTACTGCAAGCTCTTCCATCCGGGAAGA
CATTATAAGCTGCTTAAACCTGAAAGACCCTCAGATCACCTGCACTGGATTTGATCGGCCAAATCTGTAC
TTAGAAGTTGGACGGAAAACAGGGAACATCCTTCAGGATCTAAAGCCGTTTCTCGTCCGAAAGGCAAGTT
CTGCCTGGGAATTTGAAGGTCCAACCATCATCTATTGTCCTTCGAGAAAAATGACAGAACAAGTTACTGC
TGAACTTGGGAAACTGAACTTAGCCTGCAGAACATACCACGCTGGCATGAAAATTAGCGAAAGGAAGGAC
GTTCATCATAGGTTCCTGAGAGATGAAATTCAGTGTGTTGTAGCTACTGTAGCTTTTGGAATGGGCATTA
ATAAAGCTGACATTCGCAAAGTTATTCATTATGGTGCGCCTAAGGAAATGGAATCCTATTACCAGGAAAT
TGGTAGAGCTGGCCGGGATGGACTTCAGAGTTCCTGTCACTTGCTCTGGGCTCCAGCAGACTTTAACACA
TCCAGGAATCTCCTTATTGAGATTCACGATGAAAAGTTCCGGTTATATAAATTAAAGATGATGGTAAAGA
TGGAAAAATACCTTCACTCCAGTCAGTGTAGGCGACGAATCATCTTGTCCCATTTTGAGGACAAATGTCT
GCAGAAGGCCTCCTTGGACATTATGGGAACTGAAAAATGCTGTGATAATTGCAGGCCCAGGCTGAATCAT
TGCCTTACTGCTAACAACTCAGAGGACGCATCCCAAGACTTTGGGCCACAAGCATTCCAGCTACTGTCTG
CTGTGGACATCCTGCAGGAGAAATTTGGAATTGGGATTCCGATCTTATTTCTCCGAGGATCTAATTCTCA
GCGTCTTCCTGATAAATATCGGGGTCACAGGCTCTTTGGTGCTGGAAAGGAGCAAGCAGAAAGTTGGTGG
AAGACCCTTTCTCACCATCTCATAGCTGAAGGATTCTTGGTAGAAGTTCCCAAGGAAAACAAATATATAA
AGACATGTTCCCTCACAAAAAAGGGTAGAAAGTGGCTTGGAGAAGCCAGTTCGCAGTCTCCTCCGAGCCT
TCTCCTTCAAGCTAATGAAGAGATGTTTCCAAGGAAAGTTCTGCTACCAAGTTCTAATCCTGTATCTCCA
GAAACGACGCAACATTCCTCTAATCAAAACCCAGCTGGATTAACTACCAAGCAGTCTAATTTGGAGAGAA
CGCATTCTTACAAAGTGCCTGAGAAAGTTTCTTCTGGGACTAACATTCCTAAAAAAAGTGCCGTGATGCC
GTCACCAGGAACATCTTCCAGCCCCTTAGAACCTGCCATCTCAGCCCAAGAGCTGGACGCTCGGACTGGG
CTATATGCCAGGCTGGTGGAAGCAAGGCAGAAACACGCTAATAAGATGGATGTACCTCCAGCTATTTTAG
CAACAAACAAGGTTCTGCTGGACATGGCTAAAATGAGACCGACTACTGTTGAAAACATGAAACAGATCGA
CGGTGTCTCTGAAGGCAAAGCTGCTCTGTTGGCCCCTCTGTTGGAAGTCATCAAACATTTCTGTCAAGTA
ACTAGTGTTCAGACAGACCTCCTTTCCAGTGCCAAACCTCACAAGGAACAGGAGAAAAGTCAGGAGATGG
AAAAGAAAGACTGCTCACTCCCCCAGTCTGTGGCCGTCACATACACTCTATTCCAGGAAAAGAAAATGCC
CTTACACAGCATAGCTGAGAACAGGCTCCTGCCTCTCACAGCAGCCGGCATGCACTTAGCCCAGGCGGTG
AAAGCCGGCTACCCCCTGGATATGGAGCGAGCTGGCCTGACCCCAGAGACTTGGAAGATTATTATGGATG
TCATCCGAAACCCTCCCATCAACTCAGATATGTATAAAGTTAAACTCATCAGAATGTTAGTTCCTGAAAA
CTTAGACACGTACCTCATCCACATGGCGATTGAGATTCTTCAGAGTGGTTCCGACAGCAGAACCCAGCCT
CCTTGTGATTCCAGCAGGAAGAGGCGTTTCCCCAGCTCTGCAGAGAGTTGTGAGAGCTGTAAGGAGAGCA
AAGAGGCGGTCACCGAGACCAAGGCATCATCTTCAGAGTCAAAGAGAAAATTACCCGAGTGGTTTGCCAA
AGGAAATGTGCCCTCAGCTGATACCGGCAGCTCATCATCAATGGCCAAGACCAAAAAGAAAGGTCTCTTT
AGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

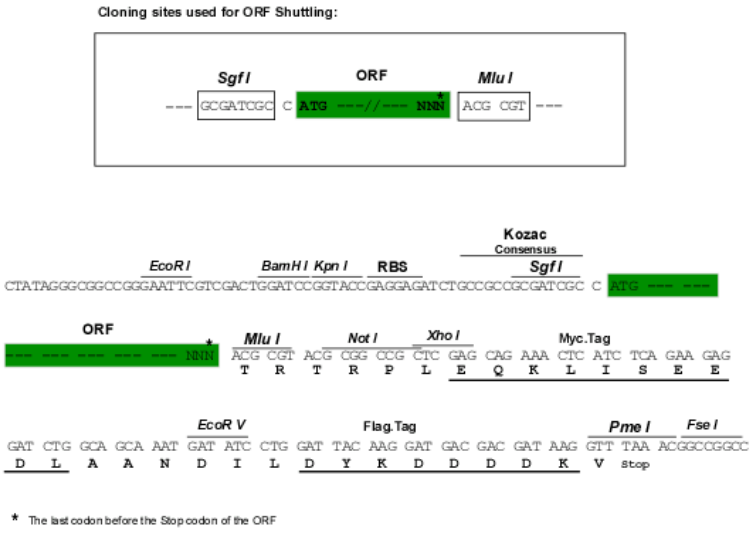
>MR211966 representing NM_001122822
Red=Cloning site Green=Tags(s)

METTSLQRKFPEWMSMQSQRCATEEKACVQKSVLEDNLPFLEFPGSIVYSYEASDCSFLSEDISMRLSDG
DVVGFDMEWPPIYKPGKRSRVAVIQLCVSESKCYLFHISSMSVFPQGLKMLLENKSIKKAGVGIEGDQWK
LLRDFDVKLESFVELTDVANEKLKCAETWSLNGLVKHVLGKQLLKDKSIRCSNWSNFPLTEDQKLYAATD
AYAGLIIYQKLGNLGDTAQVFALNKAEENLPLEMKKQLNSISEEMRDLANRFPVTCRNLETLQRVPVILK
SISENLCSLRKVICGPTNTETRLKPGSSFNLLSSEDSAAAGEKEKQIGKHSTFAKIKEEPWDPELDSLVK
QEEVDVFRNQVKQEKGESENEIEDNLLREDMERTCVIPSISENELQDLEQQAKEEKYNDVSHQLSEHLSP
NDDENDSSYIIESDEDLEMEMLKSLENLNSDVVEPTHSTWLEMGTNGRLPPEEEDGHGNEAIKEEQEEED
HLLPEPNAKQINCLKTYFGHSSFKPVQWKVIHSVLEERRDNVVVMATGYGKSLCFQYPPVYTGKIGIVIS
PLISLMEDQVLQLELSNVPACLLGSAQSKNILGDVKLGKYRVIYITPEFCSGNLDLLQQLDSSIGITLIA
VDEAHCISEWGHDFRSSFRMLGSLKTALPLVPVIALSATASSSIREDIISCLNLKDPQITCTGFDRPNLY
LEVGRKTGNILQDLKPFLVRKASSAWEFEGPTIIYCPSRKMTEQVTAELGKLNLACRTYHAGMKISERKD
VHHRFLRDEIQCVVATVAFGMGINKADIRKVIHYGAPKEMESYYQEIGRAGRDGLQSSCHLLWAPADFNT
SRNLLIEIHDEKFRLYKLKMMVKMEKYLHSSQCRRRIILSHFEDKCLQKASLDIMGTEKCCDNCRPRLNH
CLTANNSEDASQDFGPQAFQLLSAVDILQEKFGIGIPILFLRGSNSQRLPDKYRGHRLFGAGKEQAESWW
KTLSHHLIAEGFLVEVPKENKYIKTCSLTKKGRKWLGEASSQSPPSLLLQANEEMFPRKVLLPSSNPVSP
ETTQHSSNQNPAGLTTKQSNLERTHSYKVPEKVSSGTNIPKKSAVMPSPGTSSSPLEPAISAQELDARTG
LYARLVEARQKHANKMDVPPAILATNKVLLDMAKMRPTTVENMKQIDGVSEGKAALLAPLLEVIKHFCQV
TSVQTDLLSSAKPHKEQEKSQEMEKKDCSLPQSVAVTYTLFQEKKMPLHSIAENRLLPLTAAGMHLAQAV
KAGYPLDMERAGLTPETWKIIMDVIRNPPINSDMYKVKLIRMLVPENLDTYLIHMAIEILQSGSDSRTQP
PCDSSRKRRFPSSAESCESCKESKEAVTETKASSSESKRKLPEWFAKGNVPSADTGSSSSMAKTKKKGLF
S

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



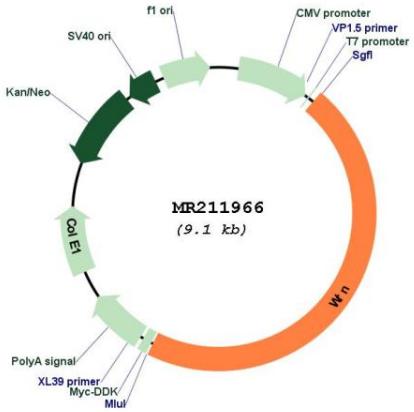
ACCN: NM_001122822

ORF Size: 4203 bp

OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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_001122822.1, NP_001116294.1
RefSeq Size:	6273 bp
RefSeq ORF:	4206 bp
Locus ID:	22427
UniProt ID:	O09053
Cytogenetics:	8 20.3 cM
MW:	157.2 kDa

Gene Summary: Multifunctional enzyme that has both magnesium and ATP-dependent DNA-helicase activity and 3'->5' exonuclease activity towards double-stranded DNA with a 5'-overhang. Has no nuclease activity towards single-stranded DNA or blunt-ended double-stranded DNA. Binds preferentially to DNA substrates containing alternate secondary structures, such as replication forks and Holliday junctions. May play an important role in the dissociation of joint DNA molecules that can arise as products of homologous recombination, at stalled replication forks or during DNA repair. Alleviates stalling of DNA polymerases at the site of DNA lesions. Important for genomic integrity. Plays a role in the formation of DNA replication focal centers; stably associates with foci elements generating binding sites for RP-A (By similarity). Plays a role in double-strand break repair after gamma-irradiation (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211966