

## Product datasheet for RC222919

### WRN (NM\_000553) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	WRN (NM_000553) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	WRN
Synonyms:	RECQ3; RECQL2; RECQL3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222919 representing NM_000553 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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CATTCTAAATGCTTAAAAATGGAAGAAATCTGGGTCTTCTACTAAAGAAGAAGAAGATGATGAAA  
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**Protein Sequence:** >RC222919 representing NM\_000553  
 Red=Cloning site Green=Tags(s)

MSEKKLETTAQQRKCPPEWMNVQNKRCAVEERKACVRKSVFEDDLPLEFTGSIVYSYDASDCSFLSEDIS  
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 ITYSLFQEKKMPKLSIAESRILPLMTIGMHLQAVKAGCPDLERAGLTPEVQKIADVIRNPPVNSDMS  
 KISLIRMLVPENIDTYLIHMAIEILKHGPDGLQPSCDVNRRCFPGSEEICSSSKRSKEEVGINTETSS  
 AERKRRLPVWFAGGSDTSKLLMDKTKRGLFS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

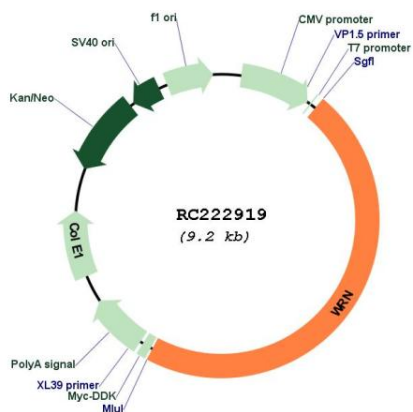


**ACCN:** NM\_000553

**ORF Size:** 4296 bp

<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_000553.2</a> , <a href="#">NP_000544.1</a>
<b>RefSeq Size:</b>	5765 bp
<b>RefSeq ORF:</b>	4299 bp
<b>Locus ID:</b>	7486
<b>UniProt ID:</b>	<a href="#">Q14191</a>
<b>Cytogenetics:</b>	8p12
<b>Protein Families:</b>	Druggable Genome, Stem cell - Pluripotency
<b>MW:</b>	162.5 kDa
<b>Gene Summary:</b>	<p>This gene encodes a member of the RecQ subfamily of DNA helicase proteins. The encoded nuclear protein is important in the maintenance of genome stability and plays a role in DNA repair, replication, transcription and telomere maintenance. This protein contains a N-terminal 3' to 5' exonuclease domain, an ATP-dependent helicase domain and RQC (RecQ helicase conserved region) domain in its central region, and a C-terminal HRDC (helicase RNase D C-terminal) domain and nuclear localization signal. Defects in this gene are the cause of Werner syndrome, an autosomal recessive disorder characterized by accelerated aging and an elevated risk for certain cancers. [provided by RefSeq, Aug 2017]</p>

Product images:



Circular map for RC222919