

**WRN Rabbit mAb**  
Catalog # AP77026**Specification**

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**WRN Rabbit mAb - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">Q14191</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Monoclonal Antibody</b>
Calculated MW	<b>162461</b>

**WRN Rabbit mAb - Additional Information****Gene ID** 7486**Other Names**

WRN

**Dilution**

WB~~1/500-1/1000

**Format**

Liquid

**WRN Rabbit mAb - Protein Information****Name** WRN**Synonyms** RECQ3, RECQL2**Function**

Multifunctional enzyme that has magnesium and ATP-dependent 3'-5' DNA-helicase activity on partially duplex substrates (PubMed: [9224595](http://www.uniprot.org/citations/9224595), PubMed: [9288107](http://www.uniprot.org/citations/9288107), PubMed: [9611231](http://www.uniprot.org/citations/9611231), PubMed: [9611231](http://www.uniprot.org/citations/9611231)). Also has 3'->5' exonuclease activity towards double-stranded (ds)DNA with a 5'-overhang (PubMed: [11863428](http://www.uniprot.org/citations/11863428), PubMed: [11863428](http://www.uniprot.org/citations/11863428)). Has no nuclease activity towards single-stranded (ss)DNA or blunt-ended dsDNA (PubMed: [11863428](http://www.uniprot.org/citations/11863428), PubMed: [11863428](http://www.uniprot.org/citations/11863428)). Helicase activity is most efficient with (d)ATP, but (d)CTP will substitute with reduced efficiency; strand displacement is enhanced by single-strand binding-protein (heterotrimeric replication protein A complex, RPA1, RPA2, RPA3) (PubMed: [9611231](http://www.uniprot.org/citations/9611231), PubMed: [9611231](http://www.uniprot.org/citations/9611231)). 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. 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 (PubMed:<a href="http://www.uniprot.org/citations/9224595" target="\_blank">9224595</a>, PubMed:<a href="http://www.uniprot.org/citations/9288107" target="\_blank">9288107</a>, PubMed:<a href="http://www.uniprot.org/citations/9611231" target="\_blank">9611231</a>). Unwinds some G-quadruplex DNA (d(CGG)n tracts); unwinding seems to occur in both 5'-3' and 3'-5' direction and requires a short single-stranded tail (PubMed:<a href="http://www.uniprot.org/citations/10212265" target="\_blank">10212265</a>). d(CGG)n tracts have a propensity to assemble into tetraplex structures; other G-rich substrates from a telomeric or IgG switch sequence are not unwound (PubMed:<a href="http://www.uniprot.org/citations/10212265" target="\_blank">10212265</a>). Depletion leads to chromosomal breaks and genome instability (PubMed:<a href="http://www.uniprot.org/citations/33199508" target="\_blank">33199508</a>).

### Cellular Location

Nucleus, nucleolus. Nucleus, nucleoplasm. Chromosome. Note=Gamma-irradiation leads to its translocation from nucleoli to nucleoplasm and PML regulates the irradiation-induced WRN relocation (PubMed:21639834). Localizes to DNA damage sites (PubMed:27063109).

### WRN Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### WRN Rabbit mAb - Images

