

### **Anti-WRN Picoband Antibody**

**Catalog # ABO11725** 

## **Specification**

# Anti-WRN Picoband Antibody - Product Information

Application
Primary Accession
Host
Reactivity
Clonality
Format
WB
014191
Human, Rabbit
Human, Rat
Polyclonal
Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Werner syndrome ATP-dependent helicase(WRN) detection. Tested with WB in Human;Rat.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-WRN Picoband Antibody - Additional Information

# **Gene ID 7486**

#### **Other Names**

Werner syndrome ATP-dependent helicase, 3.6.4.12, DNA helicase, RecQ-like type 3, RecQ3, Exonuclease WRN, 3.1.-.-, RecQ protein-like 2, WRN, RECQ3, RECQL2

# Calculated MW 162461 MW KDa

#### **Application Details**

Western blot, 0.1-0.5  $\mu$ g/ml, Human, Rat<br/>br>

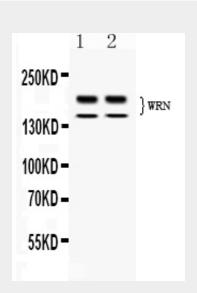
#### **Subcellular Localization**

Nucleus, nucleolus . Nucleus . Nucleus, nucleoplasm . Gamma- irradiation leads to its translocation from nucleoli to nucleoplasm and PML regulates the irradiation-induced WRN relocation. .

#### **Protein Name**

Werner syndrome ATP-dependent helicase

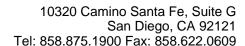
#### **Contents**



Western blot analysis of WRN expression in rat thymus extract (lane 1) and human placenta extract (lane 2). WRN at 162KD, 200KD was detected using rabbit anti- WRN Antigen Affinity purified polyclonal antibody (Catalog # ABO11725) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

# Anti-WRN Picoband Antibody - Background

Werner syndrome ATP-dependent helicase, also known as DNA helicase, RecQ-like type 3, is an enzyme that in humans is encoded by the WRN gene. This gene encodes a member of the RecQ subfamily and the DEAH (Asp-Glu-Ala-His) subfamily of DNA and RNA helicases. DNA helicases are involved in many aspects of DNA metabolism, including transcription, replication, recombination, and repair. This protein contains a nuclear localization signal in the C-terminus and shows a predominant nucleolar localization. It possesses an intrinsic 3' to 5' DNA helicase activity, and is also a 3' to 5' exonuclease. Based on interactions between this protein and Ku70/80 heterodimer in DNA end processing, this protein may be involved in the repair of double strand DNA breaks. Defects in this gene





Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

#### **Immunogen**

E. coli-derived human WRN recombinant protein (Position: Q122-N240). Human WRN shares 84% amino acid (aa) sequence identity with mouse WRN.

#### **Purification**

Immunogen affinity purified.

# **Cross Reactivity**

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-WRN Picoband Antibody - Protein Information

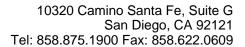
Name WRN

Synonyms RECQ3, RECQL2

#### **Function**

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

are the cause of Werner syndrome, an autosomal recessive disorder characterized by premature aging.





break repair after gamma-irradiation.

#### **Cellular Location**

Nucleus, nucleolus. Nucleus Nucleus, nucleoplasm. Note=Gamma- irradiation leads to its translocation from nucleoli to nucleoplasm and PML regulates the irradiation-induced WRN relocation

# **Anti-WRN Picoband Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture