

Product name:	WRN (phospho Ser1141) Rabbit Polyclonal Antibody
Cat number:	ABN05634
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Werner Syndrome Helicase around the phosphorylation site of Ser1141. AA range:1107-1156
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ELISA 1:5000-1:10000
Molecular Weight:	162kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

Werner syndrome RecQ like helicase(WRN) Homo sapiens 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 are the cause of Werner syndrome, an autosomal recessive disorder characterized by premature aging. [provided by RefSeq, Jul 2008],disease:Defects in WRN are a cause of Werner syndrome (WRN) [MIM:277700]. WRN is a rare autosomal recessive progeroid syndrome characterized by the premature onset of multiple age-related disorders, including atherosclerosis, cancer, non-insulin-dependent diabetes mellitus, ocular cataracts and osteoporosis. The major cause of death, at a median age of 47, is myocardial infarction. Currently all known WS mutations produces prematurely terminated proteins.,disease:Defects in WRN may be a cause of colorectal cancer (CRC) [MIM:114500].,function:Essential for the formation of DNA replication focal centers; stably associates with foci elements generating binding sites for RP-A. Exhibits a magnesium-dependent ATP-dependent DNA-helicase activity. May be involved in the control of genomic stability.,online information:WRN mutation db (Warner disease),PTM:Phosphorylated by PRKDC. Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the helicase family. RecQ subfamily.,similarity:Contains 1 3'-5' exonuclease domain.,similarity:Contains 1 helicase ATP-binding domain.,similarity:Contains 1 helicase C-terminal domain.,similarity:Contains 1 HRDC domain.,subunit:Interacts via its N-terminal domain with WRNIP1 (By similarity). Interacts with EXO1.,