abcam

Product datasheet

Recombinant Human Werner's syndrome helicase WRN protein ab112372

1 图像

描述

产品名称	重组人Werner's syndrome helicase WRN蛋白
生物活性	useful for Antibody Production and Protein Array
表达系统	Wheat germ
Accession	Q14191
蛋白长度	Protein fragment
无动物成分	No
性质	Recombinant
种属	Human
序列	NPPVNSDMSKISLIRMLVPENIDTYLIHMAIEILKHGPDSGL QPSCDVNK RRCFPGSEEICSSSKRSKEEVGINTETSSAERKRRLPVWFAK GSDTSKKL MDKTKRGGLFS
预测分子量	38 kDa including tags
氨基酸	1322 to 1432

技术指标

Our **Abpromise guarantee** covers the use of **ab112372** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Western blot ELISA SDS-PAGE
形式	Liquid
补充说明	This product is useful for Antibody Production and Protein Array.

制备和贮存

稳定性和存储	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles.

pH: 8.00
Constituents: 0.31% Glutathione, 0.79% Tris HCl

Glutathione is reduced

常规信息

功能

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.

疾病相关

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.
Defects in WRN may be a cause of colorectal cancer (CRC) [MIM:114500].

序列相似性

Belongs to the helicase family. RecQ subfamily.
Contains 1 3'-5' exonuclease domain.
Contains 1 helicase ATP-binding domain.
Contains 1 helicase C-terminal domain.
Contains 1 HRDC domain.

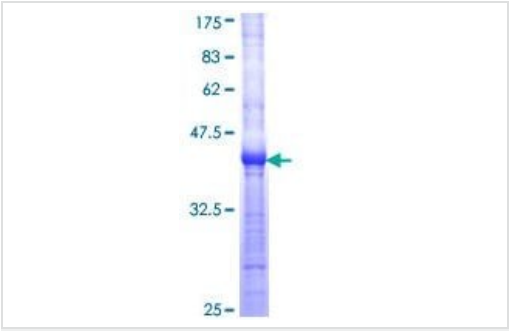
翻译后修饰

Phosphorylated by PRKDC. Phosphorylated upon DNA damage, probably by ATM or ATR.

细胞定位

Nucleus > nucleolus. Nucleus.

图片



SDS-PAGE - Recombinant Human Werner's syndrome helicase WRN protein (ab112372)

ab112372 analysed by 12.5% SDS-PAGE and stained with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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