# abcam

## Product datasheet

## Recombinant Human Rad21 protein ab152647

## 1 图像

## 描述

产品名称 重组人Rad21蛋白

表达系统 Wheat germ

Accession O60216

**蛋白长度** Full length protein

无动物成分 No

性质 Recombinant

种属 Human

序列 MFYAHFVLSKRGPLAKIWLAAHWDKKLTKAHVFECNLESSVE

SIISPKVK

MALRTSGHLLLGVVRIYHRKAKYLLADCNEAFIKIKMAFRPG

**VVDLPEEN** 

REAAYNAITLPEEFHDFDQPLPDLDDIDVAQQFSLNQSRVEE

**ITMREEVG** 

NISILQENDFGDFGMDDREIMREGSAFEDDDMLVSTTTSNLL

LESEQSTS

NLNEKINHLEYEDQYKDDNFGEGNDGGILDDKLISNNDGGIF

**DDPPALSE** 

AGVMLPEQPAHDDMDEDDNVSMGGPDSPDSVDPVEPMPTMTD

**QTTLVPNE** 

EEAFALEPIDITVKETKAKRKRKLIVDSVKELDSKTIRAQLS

DYSDIVTT

LDLAPPTKKLMMWKETGGVEKLFSLPAQPLWNNRLLKLFTRC

LTPLVPED

LRKRRKGGEADNLDEFLKEFENPEVPREDQQQQHQQRDVIDE

PTTFFPSR

LQESVMEASRTNIDESAMPPPPPQGVKRKAGQIDPEPVMPPQ

**QVEQMEIP** 

PVELPPEEPPNICQLIPELELLPEKEKEKEKEKEDDEEEEDE

DASGGDQD

QEERRWNKRTQQMLHGLQRALAKTGAESISLLELCRNTNRKQ AAAKFYSF LVLKKQQAIELTQEEPYSDIIATPGPRFHII

预测分子量 98 kDa including tags

**氨基酸** 1 to 631

标签 GST tag N-Terminus

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#### 技术指标

Our Abpromise quarantee covers the use of ab152647 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

## 制备和贮存

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

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

#### 常规信息

功能 Cleavable component of the cohesin complex, involved in chromosome cohesion during cell

cycle, in DNA repair, and in apoptosis. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At metaphase-anaphase transition, this protein is cleaved by separase/ESPL1 and dissociates from chromatin, allowing sister chromatids to segregate. The cohesin complex may also play a role in spindle pole assembly during mitosis. Also plays a role in apoptosis, via its cleavage by caspase-3/CASP3 or caspase-7/CASP7 during early steps of apoptosis: the C-terminal 64 kDa cleavage product may act as a

nuclear signal to initiate cytoplasmic events involved in the apoptotic pathway.

序列相似性 Belongs to the rad21 family.

结**构域** The C-terminal part associates with the head of SMC1A, while the N-terminal part binds to the

head of SMC3.

翻译后修饰 Cleaved by separase/ESPL1 at the onset of anaphase. Cleaved by caspase-3 and caspase-7 at

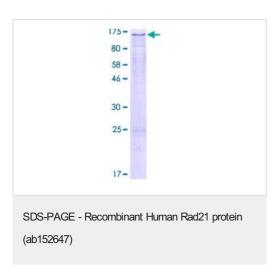
the beginning of apoptosis. The cleavage by ESPL1 and caspase-3 take place at different sites. Phosphorylated; becomes hyperphosphorylated in M phase of cell cycle. The large dissociation of cohesin from chromosome arms during prophase may be partly due to its phosphorylation by

PLK.

细**胞定位** Nucleus. Chromosome. Chromosome > centromere. Associates with chromatin. Before prophase

it is scattered along chromosome arms. During prophase, most of cohesin complexes dissociate from chromatin probably because of phosphorylation by PLK, except at centromeres, where cohesin complexes remain. At anaphase, it is cleaved by separase/ESPL1, leading to the dissociation of the complex from chromosomes, allowing chromosome separation. Once cleaved by caspase-3, the C-terminal 64 kDa cleavage product translocates to the cytoplasm, where it

may trigger apoptosis.



12.5% SDS-PAGE analysis of ab152647 stained with Coomassie Blue.

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