# abcam

### Product datasheet

## Anti-Rad21 antibody ab992

★★★★★ 20 Abreviews 186 References 2 图像

概述

产**品名称** Anti-Rad21抗体

描述 兔多克隆抗体to Rad21

**宿主** Rabbit

特异性 The epitope recognized by Anti-Rad21 antibody (ab992) maps to a region between residue 575

and the C-terminus (residue 631) human Rad21 homolog using the numbering given in entry

NP\_006256.1 (GenelD 5885).

**经测试应用 适用于:** IP, WB

种属反应性 与反应: Mouse, Human

预测可用于: Rat, Rabbit, Horse, Chicken, Guinea pig, Cow, Dog, Turkey, Chimpanzee, Gorilla,

Chinese hamster, Orangutan, Elephant 4

免疫原 Synthetic peptide corresponding to Human Rad21 (C terminal) conjugated to keyhole limpet

haemocyanin. Represented a portion of human Rad21 encoded within exon 14 (LocusLink ID

5885).

阳性对照 WB: HeLa, Jurkat, HEK293T, RKO, GaMG, MCF-7, A-549, U2OS, NIH/3T3, and TCMK-1 whole

cell lysates.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or

contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

**存储溶液** pH: 7

Preservative: 0.1% Sodium azide

Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris

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纯**度** Immunogen affinity purified

**克隆** 多克隆

同种型 lgG

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab992于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IP	★ ★ ☆ ☆ ☆ ☆ (1)	Use at an assay dependent concentration. ab992 used for IP at 6 µg per reaction.
WB	<b>★★★★</b> (7)	1/500 - 1/5000. Predicted molecular weight: 72 kDa. Band observed at ~130 kDa.

#### 靶标

#### 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.

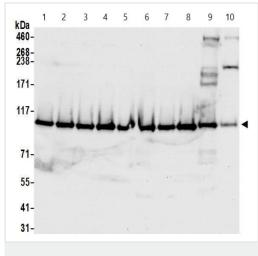
翻译后修饰

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.

#### 图片



Western blot - Anti-Rad21 antibody (ab992)

All lanes: Anti-Rad21 antibody (ab992) at 0.04 µg/ml

**Lane 1 :** HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2: Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate

**Lane 3**: HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 4 :** RKO (human cell line from colon carcinoma) whole cell lysate

**Lane 5**: GaMG (human cell line from glioblastoma) whole cell lysate

Lane 6 : MCF7 (human breast adenocarcinoma cell line) whole cell lysate

Lane 7 : A549 (human lung carcinoma cell line) whole cell lysate

Lane 8 : U-2 OS (human bone osteosarcoma epithelial cell line)

whole cell lysate

Lane 9: NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

Lane 10 : TCMK-1 (mouse epithelial kidney cell line transformed with SV40) whole cell lysate

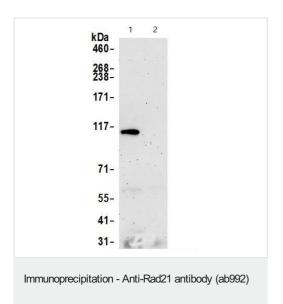
Lysates/proteins at 50 µg per lane.

Developed using the ECL technique.

Predicted band size: 72 kDa

Exposure time: 10 seconds

Lysates prepared using NETN lysis buffer.



Immunoprecipitation analysis of whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) from HeLa (human epithelial cell line from cervix adenocarcinoma) cells prepared using NETN lysis buffer.

Lane 1: ab992 used for IP at 6 µg per reaction

Lane 2: Control IgG

For blotting immunoprecipitated Rad21, a rabbit anti-Rad21 recombinant monoclonal antibody was used at 1/1000. Detected using chemiluminescence with an exposure time of 3 minutes.

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

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