## abcam

## Product datasheet

## Anti－Rad51 antibody ab63802

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## 概述

产品名称
描述

## Anti－Rad51抗体

宿主
Chicken
经测试应用
种属反应性
免疫原
阳性对照
常规说明
适用于：WB
与反应：Human
Purified recombinant full length protein（Human）
WB：HeLa cell extract．

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

| 形式 | Liquid |
| :---: | :---: |
| 存放说明 | Shipped at $4^{\circ} \mathrm{C}$ ．Store at $+4^{\circ} \mathrm{C}$ short term（1－2 weeks）．Store at $-20^{\circ} \mathrm{C}$ or $-80^{\circ} \mathrm{C}$ ．Avoid freeze／ thaw cycle． |
| 存储溶液 | pH： 6 |
|  | Preservative：0．09\％Sodium azide |
|  | Constituent：Whole serum |
| 纯度 | Whole antiserum |
| 克隆 | 多克隆 |
| 同种型 | $\lg \mathrm{Y}$ |

## 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 |
| :--- | :--- | :--- |
| WB | th | $1 / 2000-1 / 7000$. Detects a band of approximately 40 kDa <br> （predicted molecular weight： 37 kDa$).$ |


| 靶标 |  |
| :---: | :---: |
| 功能 | Plays an important role in homologous strand exchange，a key step in DNA repair through homologous recombination．Binds to single and double－stranded DNA and exhibits DNA－ dependent ATPase activity．Catalyzes the recognition of homology and strand exchange between homologous DNA partners to form a joint molecule between a processed DNA break and the repair template．Binds to single－stranded DNA in an ATP－dependent manner to form nucleoprotein filaments which are essential for the homology search and strand exchange （PubMed：26681308）．Part of a PALB2－scaffolded HR complex containing BRCA2 and RAD51C and which is thought to play a role in DNA repair by HR．Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51C and XRCC3． |
| 组织特异性 | Highly expressed in testis and thymus，followed by small intestine，placenta，colon，pancreas and ovary．Weakly expressed in breast． |
| 疾病相关 | Breast cancer <br> Mirror movements 2 <br> Defects in RAD51 are found in a patient with microcephaly，mental retardation without bone marrow failure and pediatric cancers． |
| 序列相似性 | Belongs to the RecA family．RAD51 subfamily． Contains 1 HhH domain． |
| 结构域 | The nuclear localization may reside in the C－terminus（between 259 and 339 AA）． |
| 翻译后修饰 | Ubiquitinated by the $\operatorname{SCF}$（FBXO18）E3 ubiquitin ligase complex，regulating RAD51 subcellular location and preventing its association with DNA． <br> Phosphorylated．Phosphorylation of Thr－309 by CHEK1 may enhance association with chromatin at sites of DNA damage and promote DNA repair by homologous recombination． <br> Phosphorylation by ABL1 inhibits function． |
| 细胞定位 | Nucleus．Cytoplasm．Cytoplasm，perinuclear region．Mitochondrion matrix．Cytoplasm， cytoskeleton，microtubule organizing center，centrosome．Colocalizes with RAD51AP1 and RPA2 to multiple nuclear foci upon induction of DNA damage．DNA damage induces an increase in nuclear levels．Together with FIGNL1，redistributed in discrete nuclear DNA damage－induced foci after ionizing radiation（IR）or camptothecin（CPT）treatment．Accumulated at sites of DNA damage in a SPIDR－dependent manner． |

## 图片



Western blot - Anti-Rad51 antibody (ab63802)

All lanes: Anti-Rad51 antibody (ab63802) at 1/2000 dilution

Lane 1 : Molecular weight marker
Lane 2 : HeLa cell extract

Predicted band size: 37 kDa
Observed band size: 40 kDa

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

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