# abcam

## Product datasheet

## Anti-Rad51C antibody ab95069

1 References 1 图像

## 概述

产**品名称** Anti-Rad51C**抗体** 

描述 兔多克隆抗体to Rad51C

宿主 Rabbit

经测试应用 适用于: WB

种属反应性 与反应: Human

预测可用于: Chimpanzee 🔷

免疫原 Synthetic peptide corresponding to Human Rad51C aa 300-400.

Database link: **O43502** 

阳性对照 Whole cell lysate from HeLa and 293T cells.

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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

常规说明

形式 Liquid

**存放说明** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**存储溶液** pH: 7

Preservative: 0.09% Sodium azide Constituent: Tris citrate/phosphate

纯**度** Immunogen affinity purified

**克隆** 多克隆

同种型 lqG

应用

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#### The Abpromise guarantee

Abpromise™承诺保证使用ab95069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
WB		1/2000 - 1/10000. Predicted molecular weight: 42 kDa.

#### 靶标

#### 功能

Essential for the homologous recombination (HR) pathway of DNA repair. Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA breaks arising during DNA replication or induced by DNA-damaging agents. The RAD51B-RAD51C dimer exhibits single-stranded DNA-dependent ATPase activity. The BCDX2 complex binds single-stranded DNA, single-stranded gaps in duplex DNA and specifically to nicks in duplex DNA. Participates in branch migration and Holliday junction resolution and thus is important for processing HR intermediates late in the DNA repair process. Also has an early function in DNA repair in facilitating phosphorylation of the checkpoint kinase CHK2 and thereby transduction of the damage signal, leading to cell cycle arrest and HR activation. Protects RAD51 from ubiquitin-mediated degradation that is enhanced following DNA damage. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51 and XRCC3. Contributes to DNA cross-link resistance, sister chromatid cohesion and genomic stability. Involved in maintaining centrosome number in mitosis.

#### 组织特异性

### 疾病相关

Expressed in a variety of tissues, with highest expression in testis, heart muscle, spleen and prostate.

Defects in RAD51C are the cause of Fanconi anemia complementation group O (FANCO) [MIM:613390]. It is a disorder affecting all bone marrow elements and resulting in anemia, leukopenia and thrombopenia. It is associated with cardiac, renal and limb malformations, dermal pigmentary changes, and a predisposition to the development of malignancies. At the cellular level it is associated with hypersensitivity to DNA-damaging agents, chromosomal instability (increased chromosome breakage) and defective DNA repair.

Defects in RAD51C are the cause of breast-ovarian cancer familial type 3 (BROVCA3) [MIM:613399]. It is a condition associated with familial predisposition to cancer of the breast and ovaries. Characteristic features in affected families are an early age of onset of breast cancer (often before age 50), increased chance of bilateral cancers (cancer that develop in both breasts, or both ovaries, independently), frequent occurrence of breast cancer among men, increased incidence of tumors of other specific organs, such as the prostate.

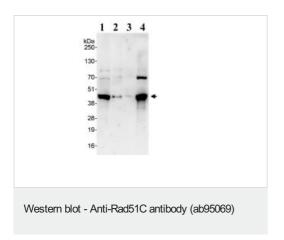
#### 序列相似性

#### 细胞定位

Belongs to the RecA family. RAD51 subfamily.

Nucleus. Cytoplasm. Cytoplasm > perinuclear region. Mitochondrion. DNA damage induces an increase in nuclear levels. Accumulates in DNA damage induced nuclear foci or RAD51C foci which is formed during the S or G2 phase of cell cycle. Accumulation at DNA lesions requires the presence of NBN/NBS1, ATM and RPA.

#### 图片



All lanes: Anti-Rad51C antibody (ab95069) at 0.1 µg/ml

Lane 1: Whole cell lysate from HeLa cells at 50 µg

Lane 2: Whole cell lysate from HeLa cells at 15 µg

Lane 3: Whole cell lysate from HeLa cells at 5 µg

Lane 4: Whole cell lysate from 293T cells at 50 µg

Developed using the ECL technique.

Predicted band size: 42 kDa

Exposure time: 3 minutes

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

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