abcam

Product datasheet

Anti-Rad51 antibody [EPR4031] ab109107

重组 RabMAb

2 References 2 图像

概述

产品名称 Anti-Rad51抗体[EPR4031]

描述 兔单克隆抗体[EPR4031] to Rad51

宿主 Rabbit

经测试应用 适用于: WB

不适用于: ICC/IF or IHC-P

种属反应性 与反应: Human

预测可用于: Mouse, Rat 🔷

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. 免疫原

阳性对照 HeLa, A431, 293T, and K562 cell lysates.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

纯度 Protein A purified

克隆 单克隆 克隆编号 EPR4031

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab109107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		1/1000 - 1/10000. Predicted molecular weight: 36 kDa.

应用说明 Is unsuitable for ICC/IF or IHC-P.

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

Mirror movements 2

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 SCF(FBXO18) E3 ubiquitin ligase complex, regulating RAD51 subcellular

location and preventing its association with DNA.

Phosphorylated. Phosphorylation of Thr-309 by CHEK1 may enhance association with chromatin

at sites of DNA damage and promote DNA repair by homologous recombination.

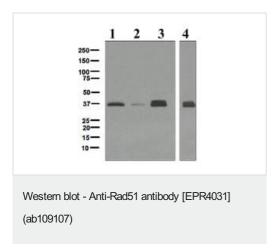
Phosphorylation by ABL1 inhibits function.

细胞定位 Nucleus. 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

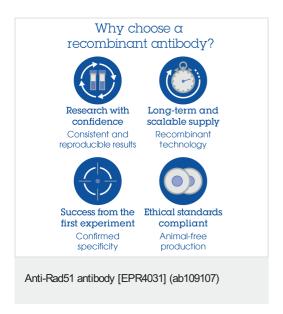


All lanes : Anti-Rad51 antibody [EPR4031] (ab109107) at 1/1000 dilution

Lane 1: HeLa cell lysate Lane 2: A431 cell lysate Lane 3: 293T cell lysate Lane 4: K562 cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 36 kDa



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