# abcam

## Product datasheet

# Anti-Rad51 antibody [RAD51/2702] ab269677

### 画像数3

#### 製品の概要

製品名 Anti-Rad51 antibody [RAD51/2702]

製品の詳細 Mouse monoclonal [RAD51/2702] to Rad51

由来種 Mouse

アプリケーション 適用あり: Flow Cyt, IHC-P, Protein Array

種交差性 交差種: Human

免疫原 Recombinant fragment within Human Rad51 aa 1-134. The exact sequence is proprietary.

Database link: Q06609

ポジティブ・コントロール Flow cyt: K562 cells. IHC-P: Human colon carcinoma tissue.

特記事項 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

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

**バッファー** pH: 7.2

Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA

精製度 Protein A/G purified

特記事項(精製) Purified from bioreactor concentrate.

**ポリ/モノ** モノクローナル **クローン名** RAD51/2702

アイソタイプ lgG1 軽鎖の種類 kappa

1

**The Abpromise guarantee Abpromise保証は、**次のテスト済みアプリケーションにおけるab269677の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt		Use a concentration of 1 - 2 μg/ml.
IHC-P		Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Protein Array		Use at an assay dependent concentration.

#### ターゲット情報

機能 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.

組織特異性 Highly expressed in testis and thymus, followed by small intestine, placenta, colon, pancreas and

ovary. Weakly expressed in breast.

関連疾患 Breast cancer

Mirror movements 2

Defects in RAD51 are found in a patient with microcephaly, mental retardation without bone

marrow failure and pediatric cancers.

配列類似性 Belongs to the RecA family. RAD51 subfamily.

Contains 1 HhH domain.

ドメイン The nuclear localization may reside in the C-terminus (between 259 and 339 AA).

翻訳後修飾 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

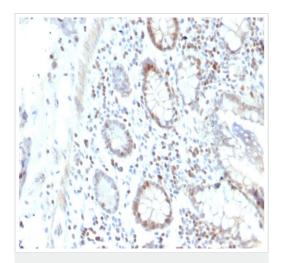
at sites of DNA damage and promote DNA repair by homologous recombination.

Phosphorylation by ABL1 inhibits function.

細胞内局在 Nucleus. Cytoplasm, perinuclear region. Mitochondrion matrix. Cytoplasm,

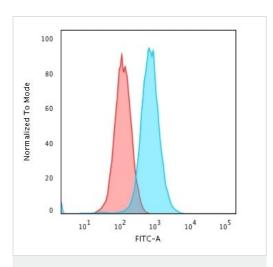
cytoskeleton, microtubule organizing center, centrosome. Colocalizes with RAD51AP1 and RPA2 to multiple nuclear foci upon induction of DNA damage. DNA damage induces an increase in nuclear levels. Together with FIGNL1, redistributed in discrete nuclear DNA damage-induced foci after ionizing radiation (IR) or camptothecin (CPT) treatment. Accumulated at sites of DNA

damage in a SPIDR-dependent manner.



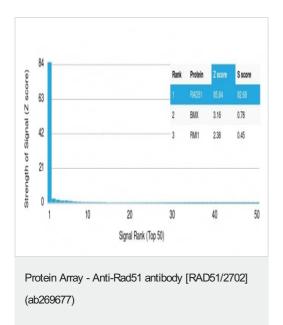
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Rad51 antibody
[RAD51/2702] (ab269677)

Formalin-fixed, paraffin-embedded human colon carcinoma tissue stained for Rad51 using ab269677 at 2  $\mu$ g/ml in immunohistochemical analysis.



Flow Cytometry - Anti-Rad51 antibody [RAD51/2702] (ab269677)

Flow cytometric analysis of K562 (human chronic myelogenous leukemia cell line from bone marrow) cells labeling Rad51 using ab269677 ar 2  $\mu$ g/ml (Blue) compared to an isotype control (Red). The secondary antibody is a Goat anti-Mouse lgG-CF488 conjugate.



Analysis of Protein Array containing more than 19,000 full-length human proteins using ab269677.

Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt<sup>TM</sup> array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt<sup>TM</sup> are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

#### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors