


Anti-Rad51 antibody [14B4] ab213

リコンビナント

★★★★★ **9 Abreviews** **83 References** 画像数 8

製品の概要

製品名	Anti-Rad51 antibody [14B4]
製品の詳細	Mouse monoclonal [14B4] to Rad51
由来種	Mouse
アプリケーション	適用あり: IHC-P, WB, ICC/IF
種交差性	交差種: Human 交差が予測される動物種: Mouse, Rat 
免疫原	Recombinant full length protein corresponding to Human Rad51 aa 1-338. Database link: Q06609
ポジティブ・コントロール	WB: RAD51 shRNA transfected (+) 293T whole cell extracts, Jurkat, Raji and NCI-H929 whole cell lysate. IHC-P: BT483 xenograft tissue, human colon esophagus tissue.
特記事項	<p>This product was changed from ascites to tissue culture supernatant on 17th September 2018. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The production method has changed from hybridoma to recombinant on 22nd March 2024</p> <p>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.</p> <p>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</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	pH: 7.40 Constituent: 100% PBS

キャリア・フリー	はい
精製度	Immunogen affinity purified
ポリ/モノ	モノクローナル
クローン名	14B4
ミエローマ	NS1
アイソタイプ	IgG2a
軽鎖の種類	kappa

アプリケーション

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ab213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確認ください。

アプリケーション	Abreviews	特記事項
IHC-P	★★★★☆ (1)	1/100 - 1/1000.
WB	★★★★★ (5)	1/500 - 1/3000. Predicted molecular weight: 37 kDa. Please see WB protocol in image legend.
ICC/IF	★★★★☆ (2)	1/100 - 1/1000.

ターゲット情報

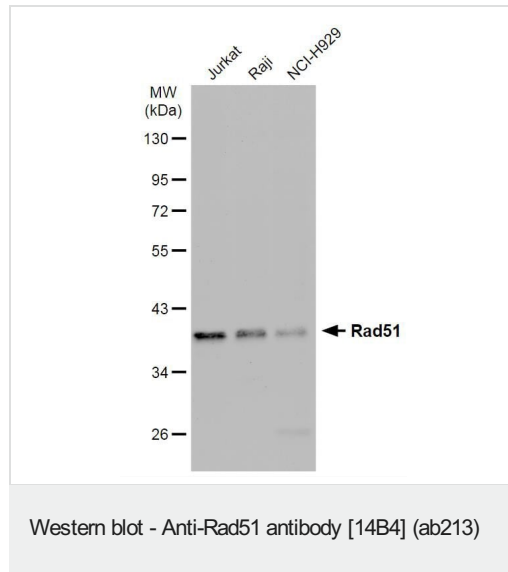
機能	Plays an important role in homologous strand exchange, a key step in DNA repair through homologous recombination. Binds to single and double-stranded DNA and exhibits DNA-dependent ATPase activity. Catalyzes the recognition of homology and strand exchange between homologous DNA partners to form a 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. 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 FIGL1, 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.

画像



All lanes : Anti-Rad51 antibody [14B4] (ab213) at 1/500 dilution

Lane 1 : Jurkat whole cell lysate

Lane 2 : Raji whole cell lysate

Lane 3 : NCI-H929 whole cell lysate

Lysates/proteins at 30 µg per lane.

Secondary

All lanes : HRP-conjugated anti-mouse IgG antibody at 1/10000 dilution

Developed using the ECL technique.

Predicted band size: 37 kDa

10% SDS-PAGE

Running condition: 80V, 15min; 140V, 40 min

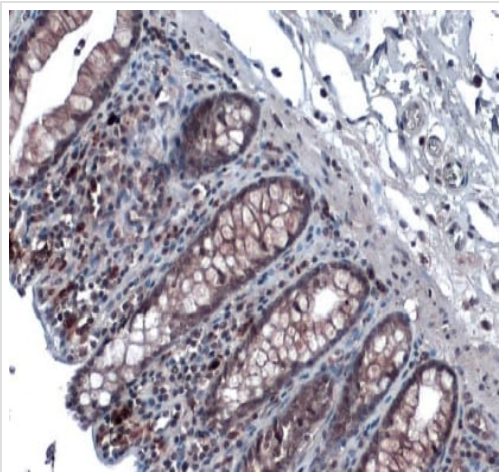
Transfer condition: Semi-dry, 18 V, 60 min (Nitrocellulose membrane)

Blocking condition: 5% non-fat milk in TBST, RT, 60 min.

Primary antibody incubation: 4°C overnight.

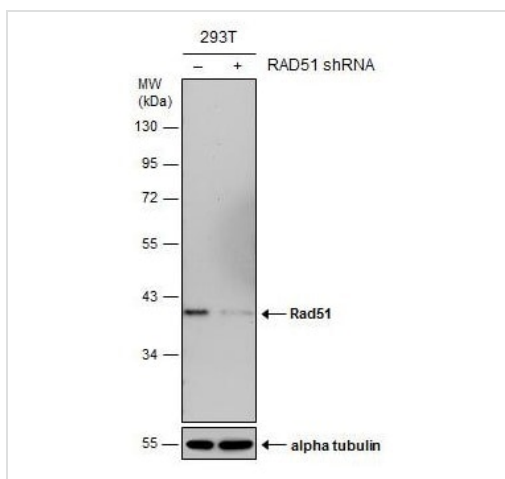
Washing condition: 5 ml TBST, 4 x 5 min.

Chemiluminescent HRP Substrate.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rad51 antibody [14B4] (ab213)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling Rad51 with ab213 at 1/100 dilution at 4°C overnight. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min (Cuisinart Electric Pressure Cooker #EPC-1200, choose "high pressure"). Endogenous peroxidase blocking: 3% H₂O₂, RT, 30minutes. Blocking: 1.5% goat serum (dilute goat serum by 1xPBS), RT, 30 min. Secondary antibody: ABC HRP Kit (Mouse IgG), 1:200, RT, 30min. Washing: PBS, 2 x 5 mins. Chromogen system: DAB.



Western blot - Anti-Rad51 antibody [14B4] (ab213)

All lanes : Anti-Rad51 antibody [14B4] (ab213) at 1/500 dilution

Lane 1 : Non-transfected 293T (-) whole cell extracts

Lane 2 : RAD51 shRNA transfected (+) 293T whole cell extracts

Lysates/proteins at 30 µg per lane.

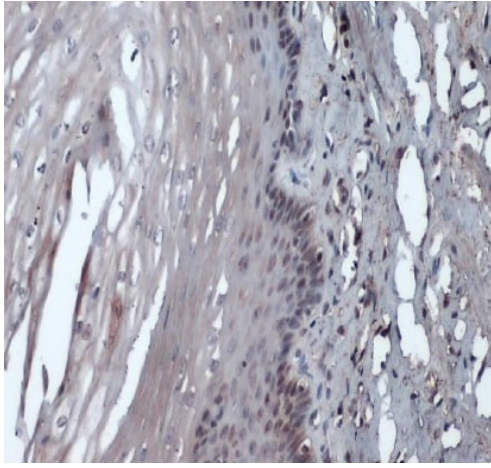
Secondary

All lanes : HRP-conjugated anti-mouse IgG antibody

Developed using the ECL technique.

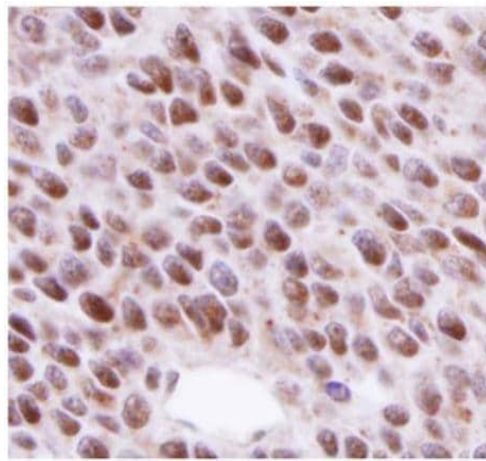
Predicted band size: 37 kDa

10% SDS-PAGE



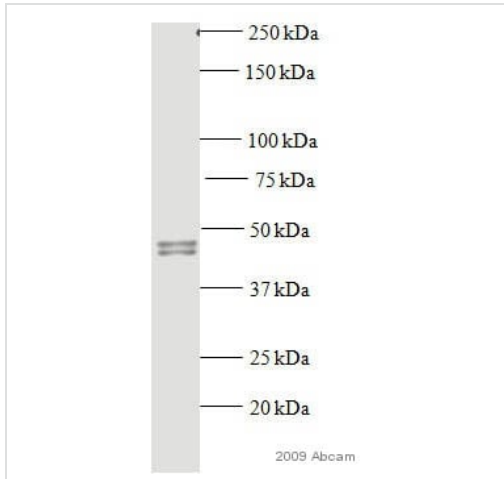
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rad51 antibody [14B4] (ab213)

Immunohistochemical analysis of paraffin-embedded human esophagus tissue labeling Rad51 with ab213 at 1/100 dilution at 4°C overnight. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min (Cuisinart Electric Pressure Cooker #EPC-1200, choose "high pressure"). Endogenous peroxidase blocking: 3% H₂O₂, RT, 30minutes. Blocking: 1.5% goat serum (dilute goat serum by 1xPBS), RT, 30 min. Secondary antibody: ABC HRP Kit (Mouse IgG), 1:200, RT, 30min. Washing: PBS, 2 x 5 mins. Chromogen system: DAB.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rad51 antibody [14B4] (ab213)

Immunohistochemical analysis of paraffin-embedded BT483 xenograft tissue labeling RAD51 with ab213 at 1/200 dilution. Nuclear staining is observed. Antigen Retrieval: EDTA based, pH 8.0 buffer, 15min.



Western blot - Anti-Rad51 antibody [14B4] (ab213)

Image courtesy of an anonymous Abreview.

Anti-Rad51 antibody [14B4] (ab213) at 1/500 dilution + lysate prepared from murine NIH3T3 cells at 20 µg

Secondary

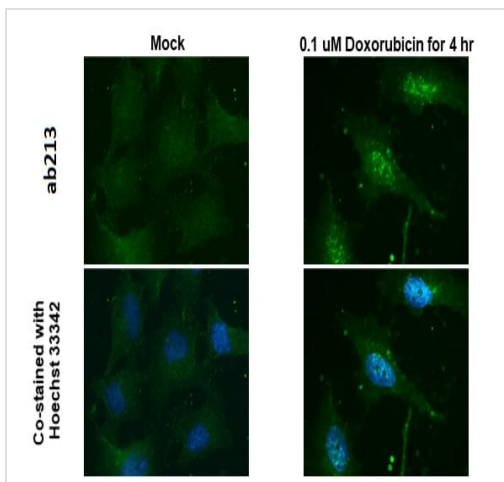
HRP conjugated anti-mouse IgG at 1/5000 dilution

Developed using the ECL technique.

Predicted band size: 37 kDa

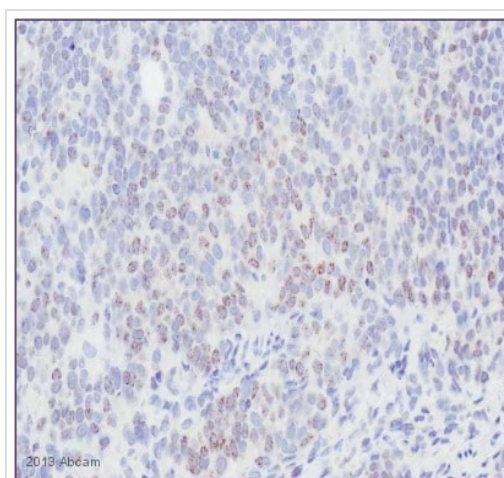
Observed band size: 42,45 kDa

Exposure time: 5 minutes



Immunocytochemistry/ Immunofluorescence - Anti-Rad51 antibody [14B4] (ab213)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed Mock and treated HeLa cells labelling Rad51 with ab213 at 1/500 dilution (Green). Blue: Fluoroshield with DAPI



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rad51 antibody [14B4] (ab213)

This image is courtesy of an anonymous Abreview

ab213 staining Rad51 in Human Lovo xenograft tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 20% serum for 20 minutes at room temperature; antigen retrieval was by heat mediation. Samples were incubated with primary antibody (1/100 in TBST) for 1 hour. An undiluted HRP-conjugated Donkey anti-mouse IgG polyclonal was used as the secondary antibody.

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