abcam

Product datasheet

Anti-Ku80 antibody [EPR3468] ab80592

יעלאעבע RabMAb

39 References 画像数7

製品の概要

製品名 Anti-Ku80 antibody [EPR3468]

製品の詳細 Rabbit monoclonal [EPR3468] to Ku80

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF

交差種: Mouse, Rat, Human 種交差性

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

ポジティブ・コントロール WB: lysates from A549, HeLa, HepG2 and MCF7 cells; IHC-P: Human tonsil tissue; ICC/IF: HeLa

cells. Flow Cyt (intra): HeLa cells. IP: HeLa cells.

特記事項 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**.

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.

Stable for 12 months at -20°C.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

精製度 Protein A purified

ポリモノ モノクローナル クローン名 **EPR3468**

ΙgG アイソタイプ

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab80592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 (Intra)		1/20.
WB		1/1000 - 1/10000. Predicted molecular weight: 83 kDa.
IP		1/50.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
ICC/IF		1/500 - 1/1000.

ターゲット情報

機能

Single stranded DNA-dependent ATP-dependent helicase. Has a role in chromosome translocation. The DNA helicase II complex binds preferentially to fork-like ends of doublestranded DNA in a cell cycle-dependent manner. It works in the 3'-5' direction. Binding to DNA may be mediated by XRCC6. Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. The XRCC5/6 dimer acts as regulatory subunit of the DNA-dependent protein kinase complex DNA-PK by increasing the affinity of the catalytic subunit PRKDC to DNA by 100-fold. The XRCC5/6 dimer is probably involved in stabilizing broken DNA ends and bringing them together. The assembly of the DNA-PK complex to DNA ends is required for the NHEJ ligation step. In association with NAA15, the XRCC5/6 dimer binds to the osteocalcin promoter and activates osteocalcin expression. The XRCC5/6 dimer probably also acts as a 5'-deoxyribose-5-phosphate lyase (5'-dRP lyase), by catalyzing the beta-elimination of the 5' deoxyribose-5-phosphate at an abasic site near double-strand breaks. XRCC5 probably acts as the catalytic subunit of 5'-dRP activity, and allows to 'clean' the termini of abasic sites, a class of nucleotide damage commonly associated with strand breaks, before such broken ends can be joined. The XRCC5/6 dimer together with APEX1 acts as a negative regulator of transcription.

配列類似性Belongs to the ku80 family.
Contains 1 Ku domain.

発生段階 Expression increases during promyelocyte differentiation.

ドメイン The EEXXXDDL motif is required for the interaction with catalytic subunit PRKDC and its

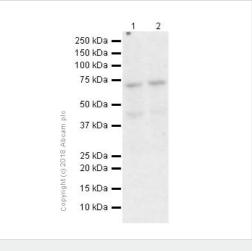
recruitment to sites of DNA damage.

翻訳後修飾 Phosphorylated on serine residues. Phosphorylation by PRKDC may enhance helicase activity.

Sumoylated.

細胞内局在 Nucleus. Chromosome.

画像



Western blot - Anti-Ku80 antibody [EPR3468] (ab80592)



Lane 1 : PC-12(Rat adrenal gland pheochromocytoma) whole cell lysate

Lane 2: NIH/3T3(Mouse embryonic fibroblast) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

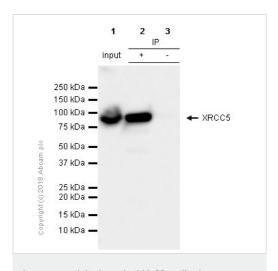
Predicted band size: 83 kDa Observed band size: 83 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ku80 antibody
[EPR3468] (ab80592)

Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using 1/100 ab80592.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Ku80 antibody [EPR3468] (ab80592)

ab80592 (purified) at 1/50 dilution (20 $\mu g/mL$) immunoprecipitating Ku80 in HeLa whole cell lysate.

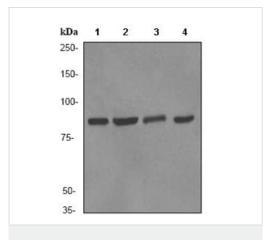
Lane 1 (input): HeLa(Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab80592 & HeLa whole cell lysate

Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab80592 in HeLa whole cell lysate

For western blotting, ab80592 at 1/500 dilution (1.86 μ g/mL) and VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDM /TBST.



Western blot - Anti-Ku80 antibody [EPR3468] (ab80592)

All lanes : Anti-Ku80 antibody [EPR3468] (ab80592) at 1/50000

dilution

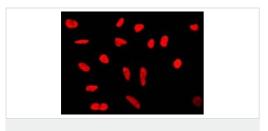
Lane 1 : A549 cell lysate
Lane 2 : HeLa cell lysate
Lane 3 : HepG2 cell lysate
Lane 4 : MCF7 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

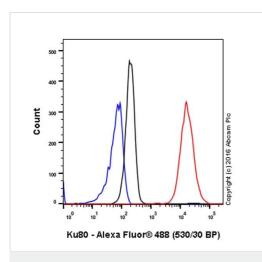
All lanes: goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 83 kDa **Observed band size:** 83 kDa



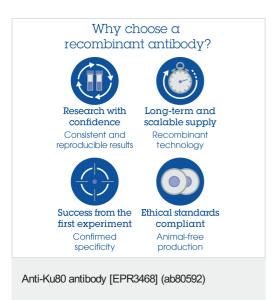
Immunocytochemistry/ Immunofluorescence - Anti-Ku80 antibody [EPR3468] (ab80592)

Immunofluorescence analysis of HeLa cells with 1/500 ab80592.



Flow Cytometry (Intracellular) - Anti-Ku80 antibody [EPR3468] (ab80592)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling Ku80 with unpurified ab80592 at 1/20 dilution (10ug/mL) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluorr[®] 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



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