

Product datasheet

Anti-Ku80 antibody [EPR3467] ab79391

重组 RabMAb

★★★★☆ 2 Abreviews 4 图像

概述

产品名称	Anti-Ku80抗体[EPR3467]
描述	兔单克隆抗体[EPR3467] to Ku80
宿主	Rabbit
特异性	The immunogen for ab79391 has 78.6% homology with mouse and rat ku80, therefore we do not guarantee reactivity in these species.
经测试应用	适用于: ICC/IF, WB, IHC-P, Flow Cyt 不适用于: IP
种属反应性	与反应: Human
免疫原	Synthetic peptide within Human Ku80 aa 50-150. The exact sequence is proprietary.
阳性对照	A549 (treated with FBS), HeLa, U937 and HepG2 cell lysates; human breast carcinoma tissue.
常规说明	Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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

This product is a recombinant rabbit monoclonal antibody.

性能

形式	Liquid
存放说明	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.
存储溶液	PBS 49%, Sodium azide 0.01%, Glycerol 50%, BSA 0.05%
纯度	Tissue culture supernatant
克隆	单克隆
克隆编号	EPR3467
同种型	IgG

应用

Our [Abpromise guarantee](#) covers the use of **ab79391** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
ICC/IF		1/100 - 1/250.
WB		1/500 - 1/2000. Detects a band of approximately 83 kDa (predicted molecular weight: 83 kDa).
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
Flow Cyt		1/150. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

应用说明 Is unsuitable for IP.

靶标

功能 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 double-stranded 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.

序列相似性 Belongs to the ku80 family.
Contains 1 Ku domain.

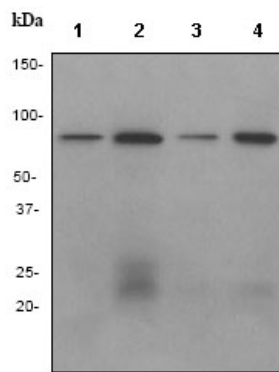
发展阶段 Expression increases during promyelocyte differentiation.

结构域 The EEXXXDDL motif is required for the interaction with catalytic subunit PRKDC and its recruitment to sites of DNA damage.

翻译后修饰 Phosphorylated on serine residues. Phosphorylation by PRKDC may enhance helicase activity. Sumoylated.

细胞定位 Nucleus. Chromosome.

图片



Western blot - Anti-Ku80 antibody [EPR3467]
(ab79391)

All lanes : Anti-Ku80 antibody [EPR3467]
(ab79391) at 1/2000 dilution

Lane 1 : A549 cell lysate, treated with FBS

Lane 2 : HeLa cell lysate

Lane 3 : U937 cell lysate

Lane 4 : HepG2 cell lysate

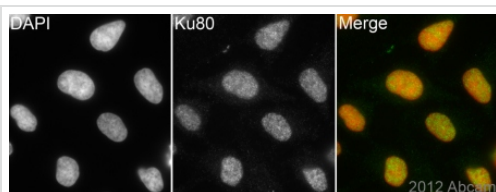
Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 83 kDa

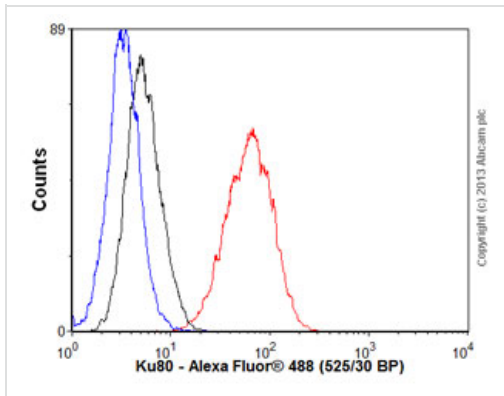
Observed band size: 83 kDa



Immunocytochemistry/ Immunofluorescence - Anti-
Ku80 antibody [EPR3467] (ab79391)

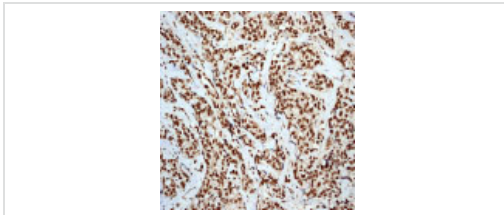
Image courtesy of an Abreview submitted by Dr. Kirk
McManus, Univ. of Manitoba/Cancer Care MCB,
Canada

ab79391 (1/200) staining Ku80 in HeLa cells
(green). Cells were fixed in methanol and
counterstained with DAPI in order to highlight
the nucleus (red). For further experimental
details please refer to Abreview.



Flow Cytometry - Anti-Ku80 antibody [EPR3467] (ab79391)

Overlay histogram showing HeLa cells stained with ab79391 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab79391, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ku80 antibody [EPR3467] (ab79391)

ab79391 at 1/250 dilution staining Ku80 in human breast carcinoma by Immunohistochemistry, Paraffin-embedded tissue.

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