

Anti-Ku80 antibody ab97433

[1 References](#) [6 图像](#)

概述

产品名称	Anti-Ku80抗体
描述	兔多克隆抗体to Ku80
宿主	Rabbit
经测试应用	适用于: WB, IHC-P, ICC/IF, IP
种属反应性	与反应: Mouse, Rat, Human
免疫原	Recombinant fragment, corresponding to a sequence within amino acids 315-563 of Human Ku80 (NP_066964). Run BLAST with Expasy Run BLAST with NCBI
阳性对照	WB:HEK-293T, A431, HeLa, HepG2, Neuro2a, PC-12 and Rat2 whole cell lysate. IHC: Cal27 Xenograft tissue. IF: HeLa cells. IP: HeLa cells.
常规说明	<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>

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 long term. Avoid freeze / thaw cycle.
存储溶液	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 10% Glycerol (glycerin, glycerine)
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab97433于以下的经测试应用

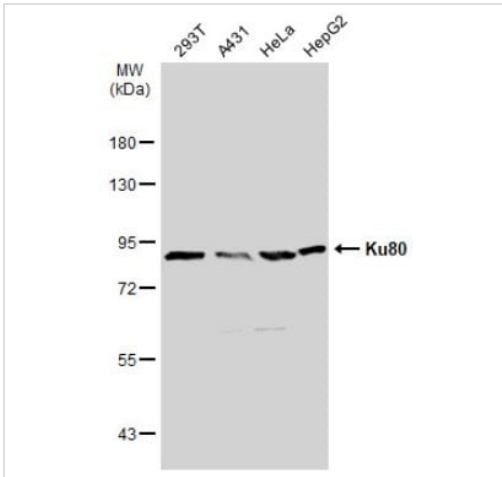
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/500 - 1/3000. Predicted molecular weight: 83 kDa.
IHC-P		1/100 - 1/1000.
ICC/IF		1/100 - 1/1000.
IP		1/100 - 1/500.

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 (ab97433)

All lanes : Anti-Ku80 antibody (ab97433) at 1/1000 dilution

Lane 1 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lane 2 : A431 (human epidermoid carcinoma cell line) whole cell lysate

Lane 3 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 4 : HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

Secondary

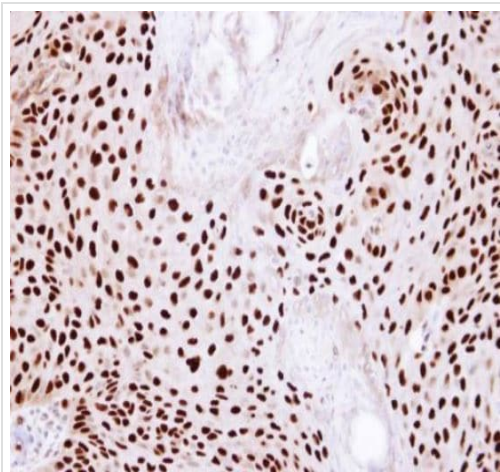
All lanes : HRP-conjugated anti-rabbit IgG antibody

Predicted band size: 83 kDa

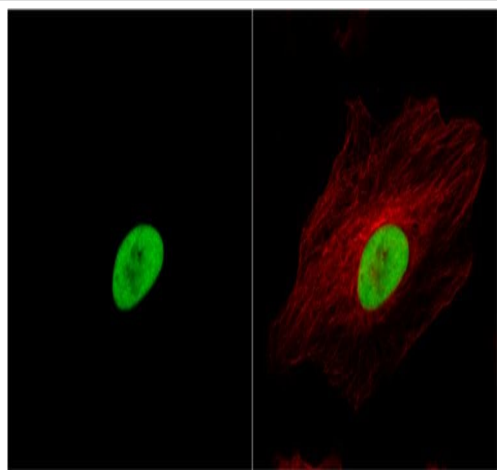
7.5% SDS-PAGE

Paraffin-embedded Cal27 xenograft tissue stained Ku80 using ab97433 at 1/100 dilution in immunohistochemical analysis.

Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min.

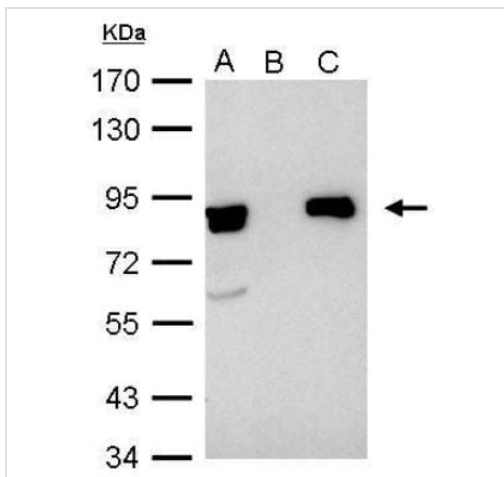


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ku80 antibody (ab97433)



Immunocytochemistry/ Immunofluorescence - Anti-Ku80 antibody (ab97433)

Immunofluorescence analysis of 4% paraformaldehyde (RT for 15 min) HeLa (human epithelial cell line from cervix adenocarcinoma) cells labelling Ku80 at nucleus at 1/500 dilution. Red: phalloidin, a cytoskeleton marker, stained by phalloidin 1/200 dilution.



Immunoprecipitation - Anti-Ku80 antibody (ab97433)

The immunoprecipitated Ku80 protein was detected by ab97433 at 1/1000 dilution, followed by anti-rabbit IgG antibody.

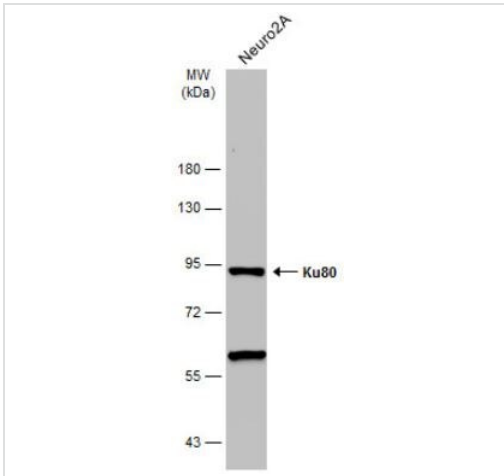
IP Sample: 1000 µg HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate.

A - 40 µg HeLa whole cell lysate.

B - Control with 2.5 µg of preimmune rabbit IgG C.

C - Immunoprecipitation of Ku80 protein by 2.5 µg of ab97433.

7.5% SDS-PAGE



Western blot - Anti-Ku80 antibody (ab97433)

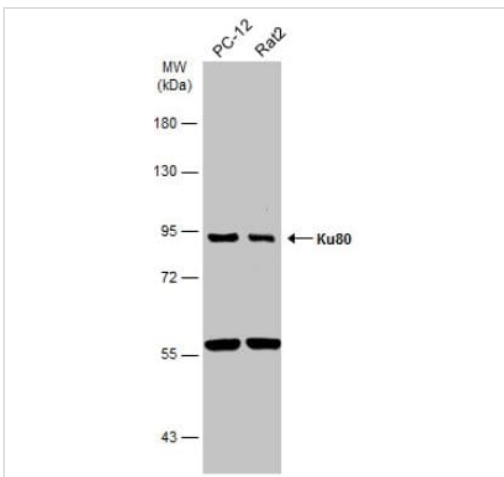
Anti-Ku80 antibody (ab97433) at 1/1000 dilution + Neuro-2a (mouse neuroblastoma cell line) whole cell lysate at 30 µg

Secondary

HRP-conjugated anti-rabbit IgG antibody

Predicted band size: 83 kDa

7.5% SDS-PAGE.



Western blot - Anti-Ku80 antibody (ab97433)

All lanes : Anti-Ku80 antibody (ab97433) at 1/1000 dilution

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

Lane 2 : Rat2 (rat fibroblast cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

Secondary

All lanes : HRP-conjugated anti-rabbit IgG antibody

Predicted band size: 83 kDa

7.5% SDS-PAGE

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