

Ku80 Rabbit mAb

Catalog No: #48954



Package Size: #48954-1 50ul #48954-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

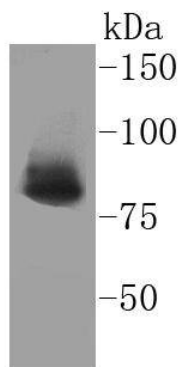
Description

Product Name	Ku80 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SC06-14
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	86 kDa subunit of Ku antigen antibody ATP dependent DNA helicase 2 subunit 2 antibody ATP dependent DNA helicase II 80 kDa subunit antibody ATP dependent DNA helicase II 86 Kd subunit antibody ATP dependent DNA helicase II antibody ATP-dependent DNA helicase 2 subunit 2 antibody ATP-dependent DNA helicase II 80 kDa subunit antibody CTC box binding factor 85 kDa antibody CTC box-binding factor 85 kDa subunit antibody CTC85 antibody CTCBF antibody DNA repair protein XRCC5 antibody KARP 1 antibody KARP1 antibody Ku 80 antibody Ku autoantigen 80kDa antibody Ku80 antibody Ku86 antibody Ku86 autoantigen related protein 1 antibody KUB 2 antibody KUB2 antibody Lupus Ku autoantigen protein p86 antibody NFIV antibody Nuclear factor IV antibody Thyroid lupus autoantigen antibody Thyroid-lupus autoantigen antibody TLAA antibody X ray repair complementing defective repair in Chinese hamster cells 5 (double strand break rejoining) antibody X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining) antibody X-ray repair cross-complementing protein 5 antibody Xray repair complementing defective repair in Chinese hamster cells 5 antibody XRCC 5 antibody XRCC5 antibody XRCC5_HUMAN antibody
Accession No.	Swiss-Prot#:P13010
Calculated MW	83 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

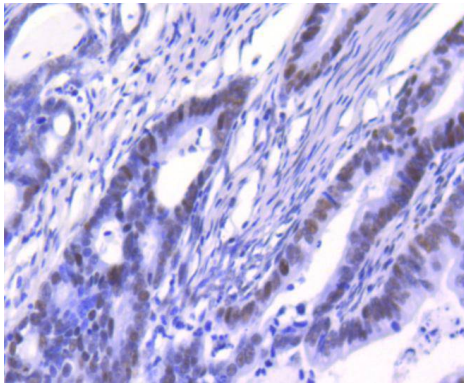
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200

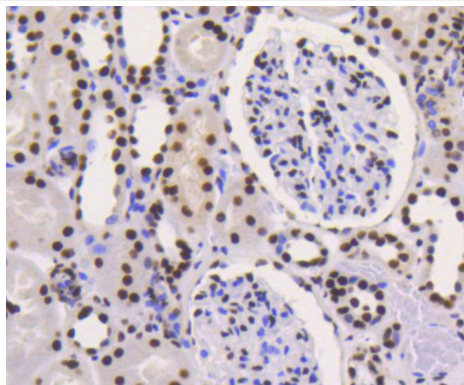
Images



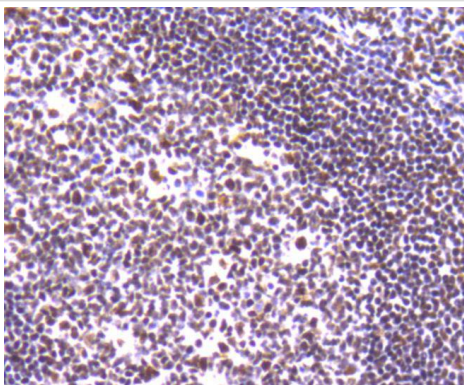
Western blot analysis of Ku80 on MCF-7 cells lysates using anti-Ku80 antibody at 1/1,000 dilution.



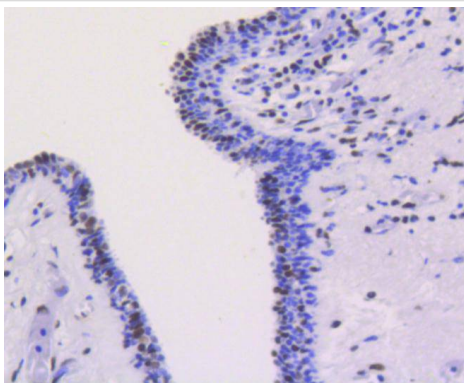
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-Ku80 antibody. Counter stained with hematoxylin.



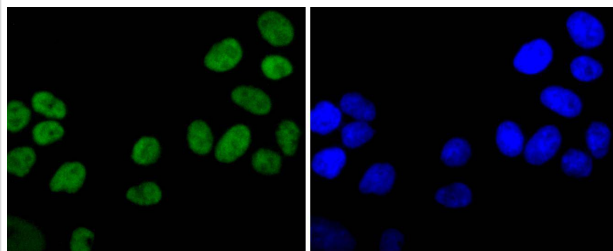
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-Ku80 antibody. Counter stained with hematoxylin.



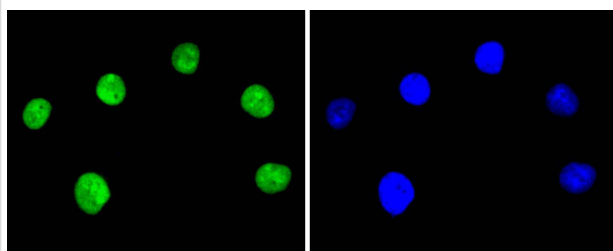
Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-Ku80 antibody. Counter stained with hematoxylin.



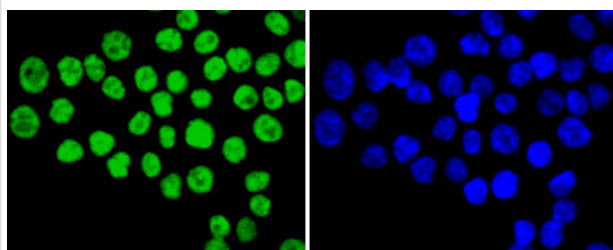
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-Ku80 antibody. Counter stained with hematoxylin.



ICC staining Ku80 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Ku80 in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Ku80 in SW480 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Background

The Ku protein is localized in the nucleus and is composed of subunits referred to as Ku-70 (p70) and Ku-86 (p86) which is also known by the synonym Ku-80 or (p80). Ku was first described as an autoantigen to which antibodies were produced in a patient with scleroderma polymyositis overlap syndrome, and was later found in the sera of patients with other rheumatic diseases. Both subunits of the Ku protein have been cloned, and a number of functions have been proposed for Ku, including cell signaling, DNA replication and transcriptional activation. Ku is involved in Pol II-directed transcription by virtue of its DNA binding activity, serving as the regulatory component of the DNA-associated protein kinase that phosphorylates Pol II and transcription factor Sp. Ku proteins also activate transcription from the U1 small nuclear RNA and the human transferrin receptor gene promoters. A Ku-related protein designated the enhancer 1 binding factor (E1BF), composed of two subunits, has been identified as a positive regulator of RNA polymerase I transcription initiation.

References

1. Ho SR et al. RNF144A, an E3 ubiquitin ligase for DNA-PKcs, promotes apoptosis during DNA damage. *Proc Natl Acad Sci U S A* 111:E2646-55 (2014).
2. Grundy GJ et al. APLF promotes the assembly and activity of non-homologous end joining protein complexes. *EMBO J* 32:112-25 (2013).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.