



Ku-80 Polyclonal Antibody

Catalog No	YP-Ab-00426
Isotype	IgG
Reactivity	Human;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	XRCC5
Immunogen	The antiserum was produced against synthesized peptide derived from human Ku70/80. AA range:683-732
Specificity	Ku-80 Polyclonal Antibody detects endogenous levels of Ku-80 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	KU80;KUB2;Ku86;NFIV;KARP1;KARP-1;Ku-80;XRCC5;X-ray repair cross-complementing protein 5;G22P2;86 kDa subunit of Ku antigen;ATP-dependent DNA helicase 2 subunit 2;ATP-dependent DNA helicase II 80 kDa subunit;CTC box-binding factor 85 kDa subunit;CTC85;CTCBF;DNA repair pr
Observed Band	80kD
Calculated Molecular Weight	80kD
Cell Pathway	Nucleus . Nucleus, nucleolus . Chromosome .
Tissue Specificity	Cervix carcinoma,Coronary artery,Heart,Neuroblastoma,Osteoblast,Thy
Function	developmental stage:Expression increases during promyelocyte differentiation., disease:Individuals with systemic lupus erythematosus (SLE) and related disorders produce extremely large amounts of autoantibodies to p70 and p86., domain:The EEXXXDDL motif is required for the interaction with catalytic subunit PRKDC and its recruitment to sites of DNA damage.,function: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 p70. Involved in DNA nonhomologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. The Ku p70/p86 dimer acts as regulatory subunit of the DNA-dependent protein kinase complex DNA-PK by increasing the affinity of t

Background

The protein encoded by this gene is the 80-kilodalton subunit of the Ku heterodimer protein which is also known as ATP-dependant DNA helicase II or DNA repair protein XRCC5. Ku is the DNA-binding component of the DNA-dependent protein kinase, and it functions together with the DNA ligase IV-XRCC4 complex in the repair of DNA double-strand break by non-homologous end joining and the completion of V(D)J recombination events. This gene functionally complements Chinese hamster xrs-6, a mutant defective in DNA double-strand break repair and in ability to undergo V(D)J recombination. A rare microsatellite polymorphism in this gene is associated with cancer in patients of varying radiosensitivity. [provided by RefSeq, Jul 2008],

matters needing attention

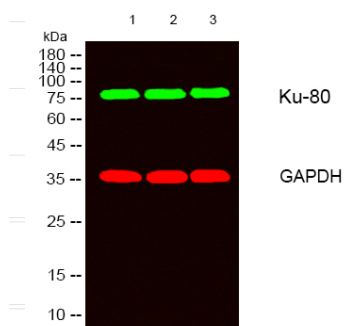
Avoid repeated freezing and thawing!

Usage suggestions

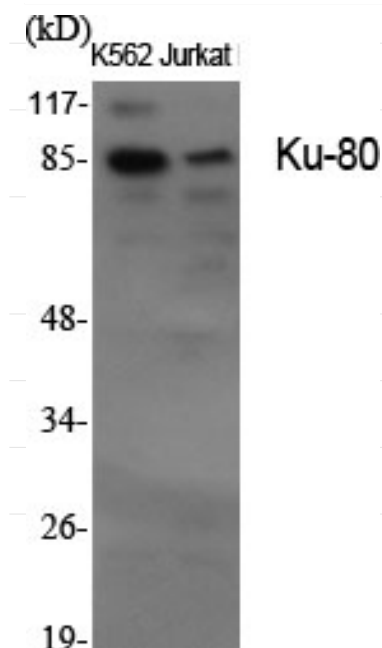
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



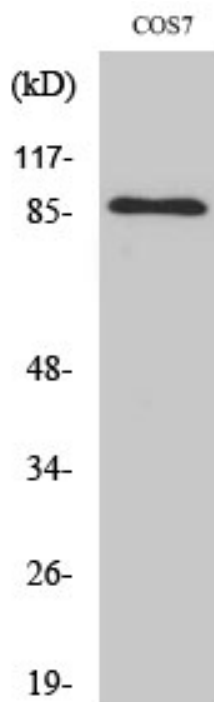
Products Images



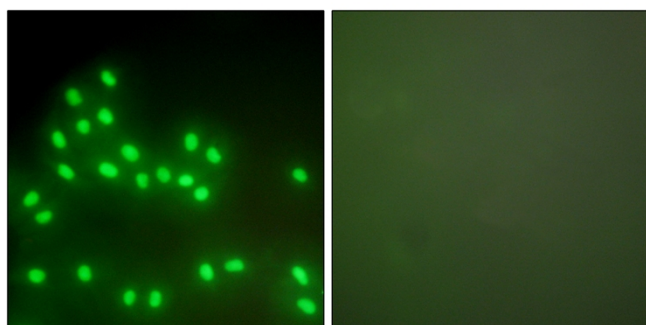
Western blot analysis of lysates from 1) K562, 2) Jurkat, 3) COS7 cells, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody (cat:RS23920) was diluted at 1:10000, 37° 1 hour. (Red) GAPDH Monoclonal Antibody (2B8) (cat:YM3029) antibody was diluted at 1:5000 as loading control, 4° over night, secondary antibody (cat:RS23710) was diluted at 1:10000, 37° 1 hour.



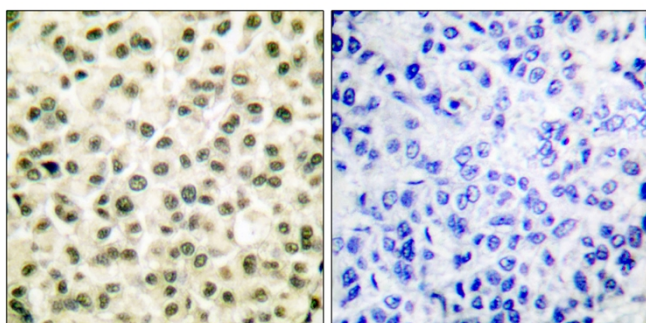
Western Blot analysis of various cells using Ku-80 Polyclonal Antibody



Western Blot analysis of COS7 cells using Ku-80 Polyclonal Antibody



Immunofluorescence analysis of A549 cells, using Ku70/80 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Ku70/80 Antibody. The picture on the right is blocked with the synthesized peptide.