

Ku-80 Polyclonal Antibody

Catalog No :	YT2501
Reactivity :	Human;Monkey
Applications :	WB;IHC;IF;ELISA
Target :	Ku-80
Fields :	>>Non-homologous end-joining
Gene Name :	XRCC5
Protein Name :	X-ray repair cross-complementing protein 5
Human Gene Id :	7520
Human Swiss Prot No :	P13010
Mouse Swiss Prot No :	P27641
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
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 80kD

Cell Pathway : Non-homologous end-joining;

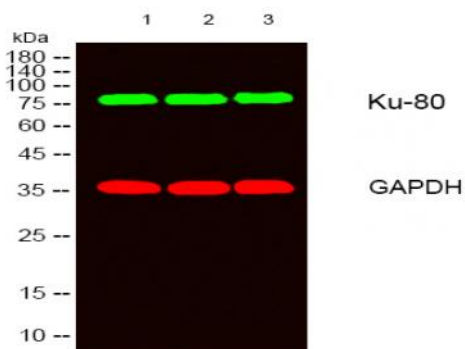
Background : The protein encoded by this gene is the 80-kilodalton subunit of the Ku heterodimer protein which is also known as ATP-dependant DNA helicase II or DNA repair protein XRCC5. Ku is the DNA-binding component of the DNA-dependent protein kinase, and it functions together with the DNA ligase 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],

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

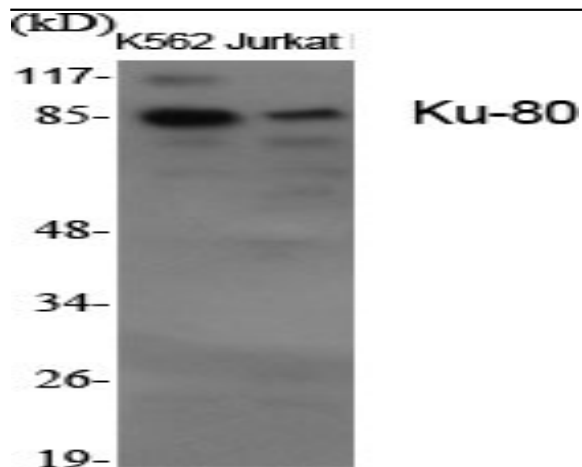
Subcellular Location : Nucleus . Nucleus, nucleolus . Chromosome .

Expression : Cervix carcinoma,Coronary artery,Heart,Neuroblastoma,Osteoblast,Thy

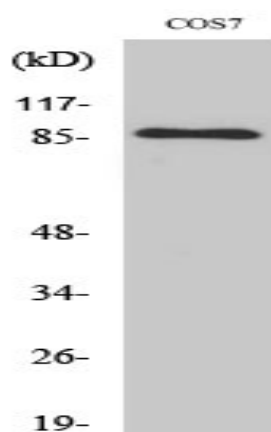
Products Images



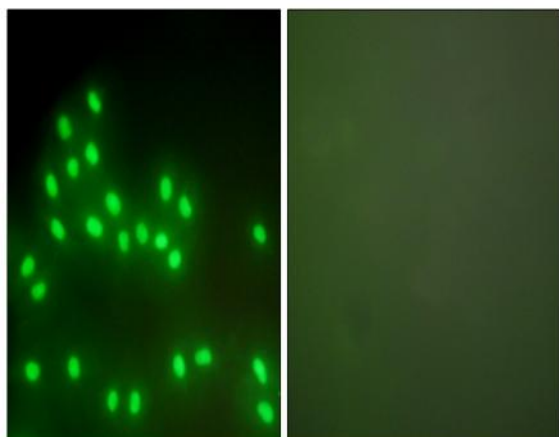
Western blot analysis of lysates from 1) K562, 2) Jurkat, 3) COS7 cells, [Green] primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1 hour. [Red] GAPDH Monoclonal Antibody(2B8) (cat:YM3029) antibody was diluted at 1:5000 as loading control,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



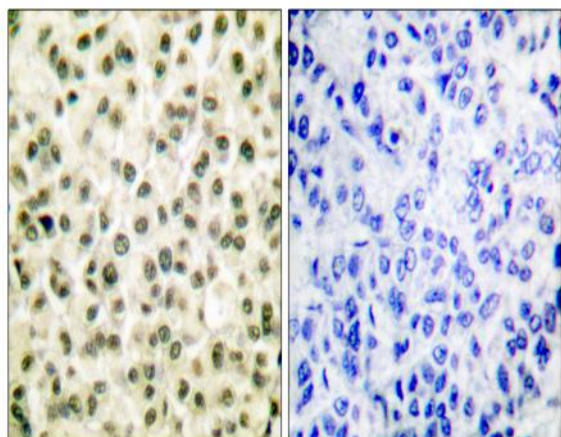
Western Blot analysis of various cells using Ku-80 Polyclonal Antibody



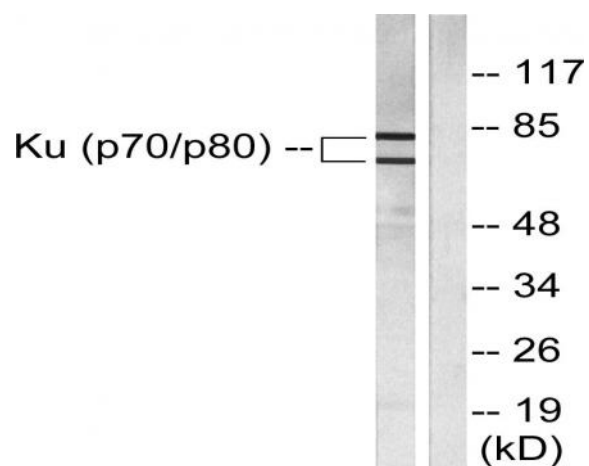
Western Blot analysis of COS7 cells using Ku-80 Polyclonal Antibody



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.



Western blot analysis of lysates from LOVO cells, using Ku70/80 Antibody. The lane on the right is blocked with the synthesized peptide.