

## Ku-86 Polyclonal Antibody

<b>Catalog No :</b>	YT2504
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Ku-86
<b>Fields :</b>	>>Non-homologous end-joining
<b>Gene Name :</b>	XRCC5
<b>Protein Name :</b>	X-ray repair cross-complementing protein 5
<b>Human Gene Id :</b>	7520
<b>Human Swiss Prot No :</b>	P13010
<b>Mouse Swiss Prot No :</b>	P27641
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human XRCC5. AA range:441-490
<b>Specificity :</b>	Ku-86 Polyclonal Antibody detects endogenous levels of Ku-86 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

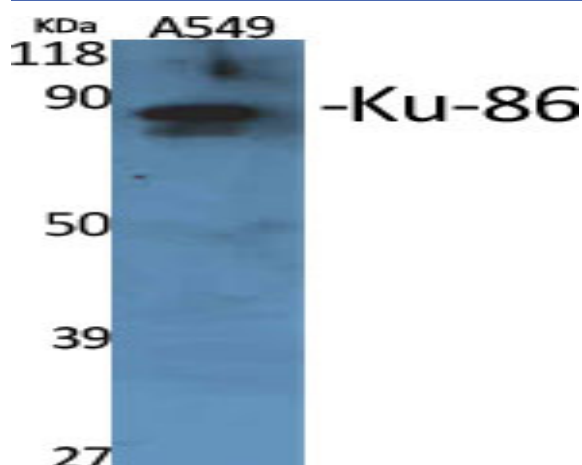
**Observed Band :** 80kD**Cell Pathway :** Non-homologous end-joining;

**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],

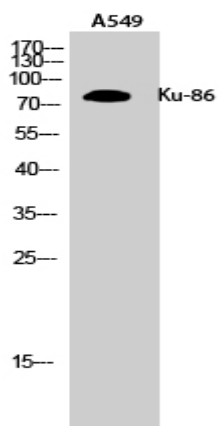
**Function :** developmental stage:Expression increases during promyelocyte differentiation.,disease:Individuals with systemic lupus erythematosus (SLE) and related disorders produce extremely large amounts of autoantibodies to p70 and p86.,domain:The EEXXXDDL motif is required for the interaction with 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

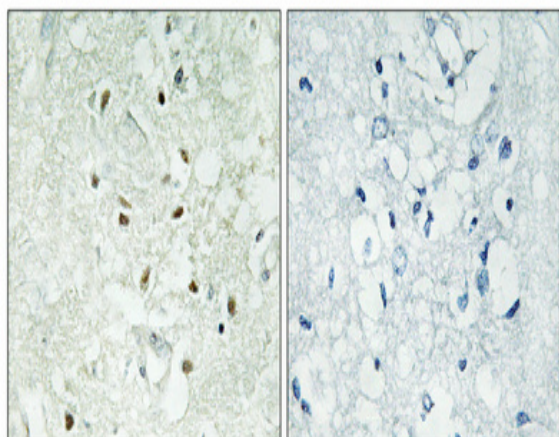
## Products Images



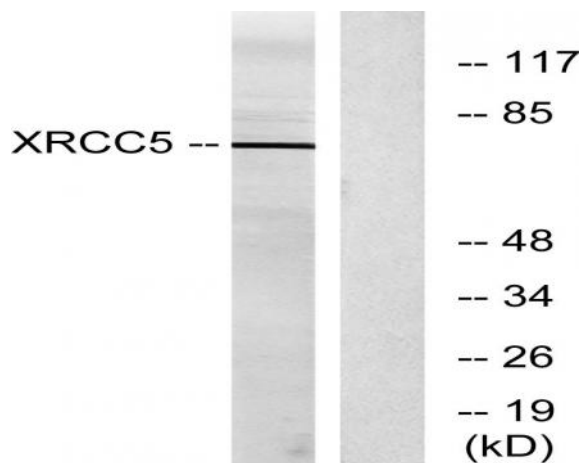
Western Blot analysis of various cells using Ku-86 Polyclonal Antibody



Western Blot analysis of A549 cells using Ku-86 Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Western blot analysis of lysates from Jurkat cells, using XRCC5 Antibody. The lane on the right is blocked with the synthesized peptide.