

## **Ku-70 Polyclonal Antibody**

Catalog No: YT2498

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Ku70/XRCC6

**Fields:** >>Non-homologous end-joining

Gene Name: XRCC6

**Protein Name:** X-ray repair cross-complementing protein 6

**Human Gene Id:** 2547

**Human Swiss Prot** 

**Prot** P12956

No:

Mouse Gene Id: 14375

**Mouse Swiss Prot** 

No:

P23475

Immunogen: The antiserum was produced against synthesized peptide derived from human

Ku70. AA range:560-609

**Specificity:** Ku-70 Polyclonal Antibody detects endogenous levels of Ku-70 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: 1:10000. 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

1/3



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 70kD

**Cell Pathway :** Protein\_Acetylation

**Background:** The p70/p80 autoantigen is a nuclear complex consisting of two subunits with

molecular masses of approximately 70 and 80 kDa. The complex functions as a single-stranded DNA-dependent ATP-dependent helicase. The complex may be involved in the repair of nonhomologous DNA ends such as that required for double-strand break repair, transposition, and V(D)J recombination. High levels of autoantibodies to p70 and p80 have been found in some patients with systemic

lupus erythematosus. [provided by RefSeq, Jul 2008],

**Function:** developmental stage:Expression does not increase during promyelocyte

differentiation., disease: Individuals with systemic lupus erythematosus (SLE) and related disorders produce extremely large amounts of autoantibodies to p70 and p86. Existence of a major autoantigenic epitope or epitopes on the C-terminal 190 amino acids of p70 containing the leucine repeat. The majority of autoantibodies

to p70 in most sera from patients with SLE seem to be reactive with this

region.,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

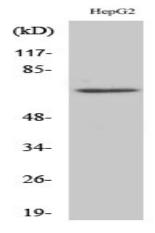
break repair and V(D)J recombination. The Ku p70/p86

Subcellular Location:

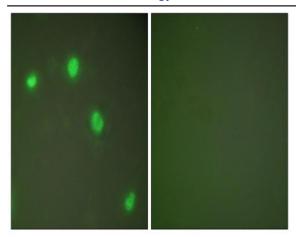
Nucleus . Chromosome .

**Expression:** Brain, Cervix carcinoma, Epithelium, Heart, Hepatocyte, Kidney, Liver, Lun

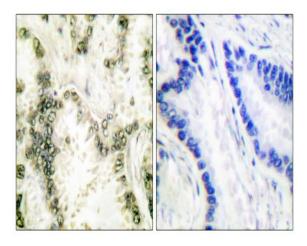
## **Products Images**



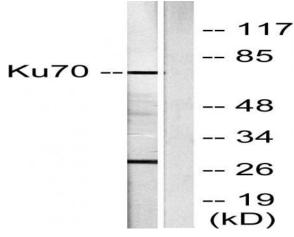
Western Blot analysis of various cells using Ku-70 Polyclonal Antibody



Immunofluorescence analysis of COS7 cells, using Ku70 Antibody. The picture on the right is blocked with the synthesized peptide.



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



Western blot analysis of lysates from HepG2 cells, using Ku70 Antibody. The lane on the right is blocked with the synthesized peptide.