



## Rabbit Anti-phospho-Ku70 (Ser5) antibody

SL16869R

<b>Product Name:</b>	phospho-Ku70 (Ser5)
<b>Chinese Name:</b>	磷酸化DNA修复酶Ku70抗体
<b>Alias:</b>	Ku70 (phospho S5); p-Ku70 (phospho S5); 5"-deoxyribose-5-phosphate lyase Ku70; 5"-dRP lyase Ku70; 70 kDa subunit of Ku antigen; ATP dependent DNA helicase 2 subunit 1; ATP dependent DNA helicase II 70 kDa subunit; ATP-dependent DNA helicase 2 subunit 1; ATP-dependent DNA helicase II 70 kDa subunit; CTC box binding factor 75 kDa subunit; CTC box-binding factor 75 kDa subunit; CTC75; CTCBF; DNA repair protein XRCC6; G22P1; Ku 70; Ku autoantigen 70kDa; Ku autoantigen p70 subunit; Ku autoantigen, 70kDa; Ku p70; Ku70; Ku70 DNA binding component of DNA-dependent proteinkinase complex (thyroid autoantigen 70 kDa; Kup70; Lupus Ku autoantigen protein p70; ML8; Thyroid autoantigen 70kD (Ku antigen); Thyroid autoantigen; Thyroid lupus autoantigen; Thyroid lupus autoantigen p70; Thyroid-lupus autoantigen; TLAA; X ray repair complementing defective repair in Chinese hamster cells 6; X-ray repair complementing defective repair in Chinese hamster cells 6; X-ray repair cross-complementing protein 6; XRCC 6; XRCC6; XRCC6 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	70kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthesised phosphopeptide derived from human Ku70 around the phosphorylation site of Ser5:WE(p-S)YY
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A

<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>This gene encodes the catalytic subunit of the DNA-dependent protein kinase (DNA-PK). It functions with the Ku70/Ku80 heterodimer protein in DNA double strand break repair and recombination. The protein encoded is a member of the PI3/PI4-kinase family.[provided by RefSeq, Jul 2010]</p> <p><b>Function:</b> 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 XRCC6. Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. The XRCC5/6 dimer acts as regulatory subunit of the DNA-dependent protein kinase complex DNA-PK by increasing the affinity of the catalytic subunit PRKDC to DNA by 100-fold. The XRCC5/6 dimer is probably involved in stabilizing broken DNA ends and bringing them together. The assembly of the DNA-PK complex to DNA ends is required for the NHEJ ligation step. Required for osteocalcin gene expression. Probably also acts as a 5'-deoxyribose-5-phosphate lyase (5'-dRP lyase), by catalyzing the beta-elimination of the 5' deoxyribose-5-phosphate at an abasic site near double-strand breaks. 5'-dRP lyase activity allows to 'clean' the termini of abasic sites, a class of nucleotide damage commonly associated with strand breaks, before such broken ends can be joined. The XRCC5/6 dimer together with APEX1 acts as a negative regulator of transcription.</p> <p><b>Subcellular Location:</b> Nucleus. Chromosome.</p> <p><b>Post-translational modifications:</b> Phosphorylation by PRKDC may enhance helicase activity. Phosphorylation of Ser-51 does not affect DNA repair.</p> <p><b>Similarity:</b> Belongs to the ku70 family. Contains 1 Ku domain. Contains 1 SAP domain.</p> <p><b>SWISS:</b> P12956</p> <p><b>Gene ID:</b> 2547</p>

**Database links:**

[Entrez Gene: 2547](#) Human

[Entrez Gene: 14375](#) Mouse

[Omim: 152690](#) Human

[SwissProt: P12956](#) Human

[SwissProt: P23475](#) Mouse

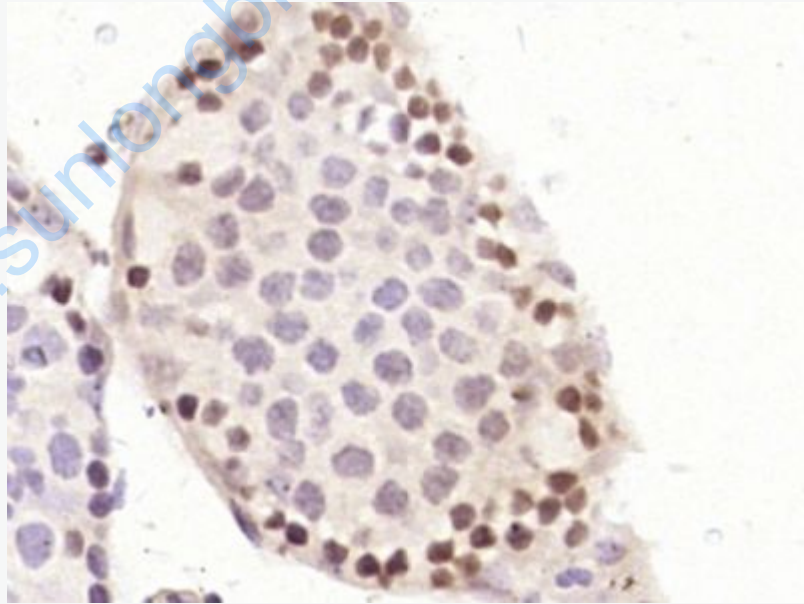
[Unigene: 292493](#) Human

[Unigene: 288809](#) Mouse

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Picture:**



Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-Ku70 (Ser5)) Polyclonal Antibody,

	Unconjugated (SL16869R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.
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