

## Ku-80 (Acetyl Lys565) Rabbit pAb

CatalogNo: YK0096

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- IHC, IF, WB

#### MW

- 82kD (Observed)

#### Isotype

- IgG

### Storage

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

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### Recommended Dilution Ratios

IHC 1:50-200

WB 1:500-2000

IF 1:50-200

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**Immunogen** Synthesized peptide derived from human Ku-80 (Acetyl-Lys565)

**Specificity** This antibody detects endogenous acetyl levels of Ku-80 (Acetyl-Lys565) at Human:K565. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites): TAKKL

## Target Information

**Gene name** XRCC5 G22P2

**Protein Name** Ku-80 (Acetyl-Lys565)

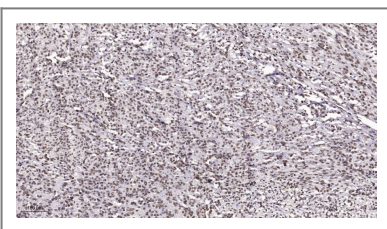
Organism	Gene ID	UniProt ID
Human	<a href="#">7520</a> ;	<a href="#">P13010</a> ;

**Cellular Localization** 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 the catalytic subunit PRKDC to DNA by 100-fold. The Ku p70/p86 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. In association with NARG1, the Ku p70/p86 dimer binds to the osteocalcin promoter and activates osteocalcin expression.,induction:In osteoblasts, by FGF2.,PTM:Phosphorylated on serine residues. Phosphorylation by PRKDC may enhance helicase activity.,PTM:Sumoylated.,similarity:Belongs to the ku80 family.,similarity:Contains 1 Ku domain.,subunit:Heterodimer of a 70 kDa and a 80 kDa subunit. The dimer associates in a DNA-dependent manner with PRKDC to form the DNA-dependent protein kinase complex DNA-PK, and with the LIG4-XRCC4 complex. The dimer also associates with NARG1, and this complex displays DNA binding activity towards the osteocalcin FGF response element (OCFRE). In addition, the 80 kDa subunit binds to the osteoblast-specific transcription factors MSX2 and RUNX2. Interacts with ELF3. May interact with APLF.,

## Validation Data



Immunohistochemical analysis of paraffin-embedded human Small intestinal stromal tumor. 1, Tris-EDTA,pH9.0 was used for antigen retrieval. 2 Antibody was diluted at 1:200 (4°C overnight).3,Secondary antibody was diluted at 1:200 (room temperature, 45min).

## Contact information

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**Ku-80 (Acetyl Lys565) Rabbit pAb**

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